

Electronic Supplementary Information
for
Synthesis of adenosine functionalized metal immobilized
magnetic nanoparticles for high selective and sensitive
enrichment of phosphopeptides

Liyuan Zhang,^{a,b} Qun Zhao,^{a,b} Zhen Liang,^a Kaiguang Yang,^a Liangliang Sun,^{a,b} Lihua Zhang^{*a} and Yukui Zhang^a

^aNational Chromatographic R. & A. Center, Key Laboratory of Separation Science for Analytical Chemistry, Dalian Institute of Chemical Physics, Chinese Academy of Science, Dalian 116023, China.

E-mail: lihuazhang@dicp.ac.cn. Fax: +86-411-84379560.

^bGraduate School of Chinese Academy of Sciences, Beijing 100039, China.

Experimental

Materials

Bovine serum albumin (BSA), β -casein ($\geq 90\%$), trypsin (bovine pancreas), trifluoroacetic acid (TFA), urea, 1,4-dithio-D,L-threitol (DTT), iodoacetamide (IAA), formic acid (FA), 2,5-dihydroxybenzoic acid (2,5-DHB), and glutaraldehyde solution (50% in H₂O, m/m) were purchased from Sigma Aldrich (St. Louis, MO, USA). Acetonitrile (HPLC grade) was ordered from Merck (Darmstadt, Germany). Adenosine-5'-triphosphate disodium salt (ATP-Na₂) ($\geq 99.9\%$) was obtained from AMRESO (Solon, OH, USA). Ti(SO₄)₂ was from Sinopharm (Shanghai, China). Conventional IMAC beads (POROS 20 MC beads, 5 μ m) were purchased from Applied Biosystems (Foster, CA, USA). TiO₂ beads (5 μ m) were purchased from GL Sciences (Tokyo, Japan). The phosphopeptide STSSDQPS[pY]SLE (Mw 1380.31) was purchased from ChinaPeptides (Shanghai, China). Water used in all experiment

was purified by Milli-Q system (Millipore Inc. Milford, MA). All other chemical reagents were analytical grade and used without further purification unless otherwise described.

Apparatus

The scanning electron microscopy (SEM) images were obtained with JSM-6360 LV (JEOL, Tokyo, Japan). Transmission electron microscopy (TEM) was performed using an FEI Tecnai G² spirit microscope (FEI, Eindhoven, Holland). ATR-FTIR spectra were recorded in the region 4000–400 cm⁻¹ by a Bruker EQUINOX 55 spectrometer, using an attenuated total reflectance accessory with the scanning speed as 32 cm⁻¹ min⁻¹ and the spectral width as 2.0 cm⁻¹. The internal reflection element was a ZnSe ATR plate (50 x 20 x 2 mm) with an aperture angle of 45°. A total of 64 scans were accumulated for each spectrum. Spectra were recorded at a nominal resolution of 4 cm⁻¹.

The ATP-MNPs (20 mg) were dissolved in acid solution (5% HNO₃/4% HCl, v/v) and the phosphate concentration was determined by ICP-AES (ICPS-8100, Shimadzu, Kyoto, Japan).

The binding capacity, recovery and reusability investigation were performed on an HPLC system equipped with LC-20AD pump and SPD-M20A diode array detector (Shimadzu, Kyoto, Japan). The HPLC column was self-packed (Kromasil C18, 5 µm, 100 Å, 0.3 × 150 mm). The UV wavelength was set at 214 nm.

MALDI-TOF MS experiments were performed in reflector positive mode on Ultraflex III MALDI-TOF/TOF MS (Bruker Daltonics, Bremen, Germany) with a Smartbeam Nd-YAG laser at 355 nm, a repetition rate of 200 Hz, and an acceleration voltage of 20 kV.

Nano-RPLC-ESI-MS/MS system was consisted of a quaternary surveyor MS pump and an LTQ linear ion trap XL mass spectrometer (Thermo Fisher Scientific, San Jose, CA, USA). The peptide mixture was loaded on a RP trap column and then separated using a C18 capillary column (75 µm × 140 mm). The trap column and the analytical column were both packed in-house with C18 silica particles (5 µm, 200 Å). Mobile phase A (2% ACN/0.1% FA) and mobile phase B (98% ACN/0.1% FA) were used to

establish a 90-min linear gradient. The gradient elution was performed from 10 to 40% B with flow rate $\sim 200 \text{ nL min}^{-1}$. The spray voltage for ESI-MS/MS was set at 2.8 kV, and the capillary was heated at 200°C . The collision energy for MS/MS scanning was 35%. The mass spectrometer was operated in a data-dependent mode, and each cycle of duty consisted of one full MS scan from 400 to 2000 m/z , followed by three pairs of MS^2/MS^3 scans. MS^3 was automatically triggered when the neutral loss peak of 98, 49 or 32.67 Da was detected from the precursor ion with 1+, 2+, or 3+ charge states, respectively. The dynamic exclusion was as follows: repeat count, 2; repeat duration, 30 s; exclusion duration, 60 s.

Tandem mass spectra were searched by MASCOT Daemon (Version 2.3.2) search engine against the ipi.RAT (Version 3.75) containing both original and reversed protein sequences. The following search criteria were employed. Full tryptic specificity was required, and two missed cleavages were allowed. Initial maximum precursor and fragment mass tolerances were set to 2 and 1 Da, respectively. The search included static modifications for cysteine alkylation by iodoacetamide and variable phosphorylation for serine/threonine/tyrosine and methionine oxidation. Peptides with at least six amino acids were considered for identification. The false discovery rates (FDR) for peptides were set at 0.01.

Preparation of Ti^{4+} -ATP-MNPs

The fabrication of Ti^{4+} -ATP-MNPs is illustrated in Scheme 1, which involved two steps, the preparation of amine-functionalized MNPs and the surface modification. Amine-functionalized MNPs were synthesized in our laboratory according to the reported protocol¹ but with some modifications. Briefly, magnetic nanoparticles were synthesized through solvothermal reaction using $\text{FeCl}_3 \cdot 6\text{H}_2\text{O}$ (1.0 g) as single iron source and 1,6-hexadamine (3.6 g) as the ligand. A transparent solution of 1,6-hexadamine, anhydrous sodium (4.0 g) and $\text{FeCl}_3 \cdot 6\text{H}_2\text{O}$ in ethylene glycol (50 mL) was obtained by vigorously stirring. Then, the mixed reagents were heated at 200°C for 6 h in a Teflon-lined stainless steel autoclave, and the obtained products were washed thoroughly with water and ethanol by using magnetic force. For surface modification, amine groups on nanoparticles (10 mg) were activated under gentle

rotation by adding 1 mL of glutaraldehyde solution (25%, m/m) in citrate buffer (100 mM, pH 5.0) for 2 h. The product was washed with citrate buffer to remove the excess glutaraldehyde. Subsequently, MNPs were functionalized by adding 1 mL of ATP solution (0.2 g/mL) in citrate buffer (100 mM, pH 5.0) for 2 h, and then washed thoroughly with citrate buffer to remove the excess ATP. The resultant ATP-functionalized MNPs were incubated in an 100 mM $\text{Ti}(\text{SO}_4)_2$ solution for 2 h to immobilize Ti^{4+} cations. Finally, the prepared Ti^{4+} -ATP-MNPs were washed thoroughly with 0.1% (v/v) FA and storage in 0.1% (v/v) FA. All of the modification processes were performed at room temperature.

Sample Preparation

1 mg BSA was dissolved and denatured in 0.1 mL of 8 M urea at 56 °C for 10 min, reduced with 20 μL of 100 mM DTT at 56 °C for 30 min, and alkylated with 20 μL of 200 mM IAA at 37 °C for 30 min in the dark. The mixture was further diluted to 1 mL with 25 mM ammonium bicarbonate, and incubated at 37 °C for 12 h with an protein-to-enzyme ratio of 50: 1 (m/m). β -Casein (1 mg) was dissolved in 1 mL of ammonium bicarbonate (25 mM, pH 8.0), and digested at 37 °C for 12 h with an enzyme-to-protein ratio of 1:50 (m/m).

Subcellular fractionation of rat liver was performed according to our previously developed protocol.² Briefly, rat liver tissue was sliced into small pieces and frozen in liquid nitrogen, then grinded into powder. Afterward, the tissue powder was washed with PBS and resuspended in lysis buffer (40 mM Tris-HCl, 250 mM sucrose, 5 mM DTT, pH 7.4) with a mixture of phosphatase inhibitors (1 mM EDTA, 0.2 mM Na_2VO_4 , 1 mM NaF and protease inhibitor cocktail set I). The suspension was homogenized on ice for 1 min, ultrasonicated for 30 s and centrifuged at 800 g for 10 min to remove nuclei and undissolved components. Subsequently, the supernatant was further centrifuged at 10000 g for 15 min, and at 100000 g for 1 h to separate cytosolic and microsomal proteins. The pellet containing mitochondrial proteins was collected and suspended in sample buffer consisting 40 mM Tris-HCl (pH 7.4), 7 M urea, 2 M thiourea, 10 mM DTT, 1 mM EDTA, and 1% (v/v) protease inhibitor

cocktail set I, and centrifuged at 150000 g for 45 min to obtain the soluble fraction.

The protein concentration of rat liver mitochondria was measured with a Bradford assay kit. The tryptic digestion protocol was almost the same as that of BSA, except that digestion was performed in 24-h.

After digestion, the solutions were acidified to pH lower than 3 by formic acid and stored at -80 °C before use.

Enrichment of Phosphopeptide by Ti^{4+} -ATP-MNPs

The procedure for the selective enrichment of phosphopeptide is illustrated in Scheme 1. The loading, washing and eluting buffers for Ti^{4+} -ATP-MNPs in phosphopeptides enrichment were conducted according to the reported protocol.³ Tryptic digest mixtures of BSA and β -casein at different molar ratio (10 μL , with the concentration of β -casein kept at 4×10^{-7} mol/L) were incubated with 2 μL of Ti^{4+} -ATP-MNPs (5 $\mu\text{g}/\mu\text{L}$) in loading buffer (50%ACN/5%TFA) with vibration of 30 min. The supernatant was removed by a magnet. To remove nonphosphopeptides, three washing steps were performed respectively with 200 μL of solution 1 (50% ACN/5% TFA/200mM NaCl), solution 2 (80% ACN/5% TFA) and solution 3 (30% ACN/0.1% TFA). Finally, the bound phosphopeptides were eluted with 50 μL of 15% ammonia aqueous solution under vibration for 30 min. The supernatant was collected, lyophilized and reconstituted in DHB solution (25 mg/mL, containing 50% ACN and 1% H_3PO_4) for MALDI-TOF MS analysis.

For further comparison, phosphopeptides were also enriched with conventional Ti^{4+} -IMAC and TiO_2 beads. The loading, washing, and eluting solution for conventional Ti^{4+} -IMAC and TiO_2 beads were the same as those used for Ti^{4+} -ATP-MNPs, except that 100 μg beads were used, respectively.

Slurries of Ti^{4+} -IMAC beads were activated according to the manufacture's instructions, with minor modifications. Briefly, IMAC beads (20 mg) were added in a 1.5-mL microcentrifuge tube. To the beads were added 1 mL of a solution containing 50 mM EDTA (pH 8.0, adjusted with 10 M NaOH), and 1 M NaCl. The suspension was vortexed for 5 min, and centrifuged at $16000 \times g$ for 3 min. After the supernatant

was discarded, the beads were washed with EDTA-NaCl solution twice more, followed by 1 mL water for 4 times. The beads were then loaded with 1 mL 100 mM $\text{Ti}(\text{SO}_4)_2$ (0.1% FA) and vortexed for 10 min. After the beads were pelleted by centrifugation at $16000 \times g$ for 3 min, the supernatant was discarded. The loading procedure was repeated once more, followed by washing with 1 mL 0.1% FA, prior storage in 1 mL 0.1% FA at 4°C.

For the phosphoproteome analysis of rat liver mitochondria, the same enrichment protocol was used, except that peptides (500 μg) were loaded on 2 mg of Ti^{4+} -ATP-MNPs and TiO_2 beads, respectively, by 200 μL loading buffer according to the optimization results of reference.⁴

All of the percentages refer to volume ratios unless otherwise specified.

On-target Enrichment of Phosphopeptides

Ti^{4+} -ATP-MNPs, was deposited on MALDI steel plate by direct dropping 0.1 μL suspension (10 $\mu\text{g}/\mu\text{L}$) with a spot diameter of ca. 1 mm. A 0.1 μL of sample solution (β -casein digest, diluted with 0.1% FA) was loaded onto Ti^{4+} -ATP-MNPs spot, and dried at room temperature, followed by washing twice with 2 μL DHB buffer (20 mg/mL in 50% ACN/5% TFA). Then 0.1 μL of a DHB matrix solution (25 mg/mL in 50% ACN/5% H_3PO_4) was added onto the spot to release the binding phosphopeptides. After the target was dried, enriched phosphopeptides on the Ti^{4+} -ATP-MNPs spot was directly analyzed by MALDI-TOF MS.

Binding capacity, recovery and reusability measurement of Ti^{4+} -ATP-MNPs

With the synthetic phosphopeptide, STSSDQPS[pY]SLE, as the sample, the binding capacity, recovery and reusability for phosphopeptide enrichment by Ti^{4+} -ATP-MNPs were investigated.

For the determination of binding capacity, 0.5 mg Ti^{4+} -ATP-MNPs was suspended in 200 μL of a 0.5 mg/mL phosphopeptide solution. After certain intervals, samples (2 μL) were taken out for HPLC analysis. The amount of adsorbed phosphopeptide was calculated from the decreased peak areas in HPLC chromatograms.

The recovery of phosphopeptide after enrichment with Ti^{4+} -ATP-MNPs was evaluated by the ratio of peak areas in HPLC chromatograms specifically eluted from

Ti⁴⁺-ATP-MNPs and before enrichment.

The reusability of Ti⁴⁺-ATP-MNPs was investigated with the recoveries of phosphopeptide after enrichment by the same Ti⁴⁺-ATP-MNPs (300 µg). Each time, 1 µg phosphopeptide was employed. The phosphopeptide recoveries obtained by three times consecutive enrichment by Ti⁴⁺-ATP-MNPs were 88.8%, 73.0% and 74.2%, respectively. The reproducibility of these recoveries was 11.2%.

Results

Fig.S1 The separation of Ti⁴⁺-ATP-MNPs by external magnetic field.

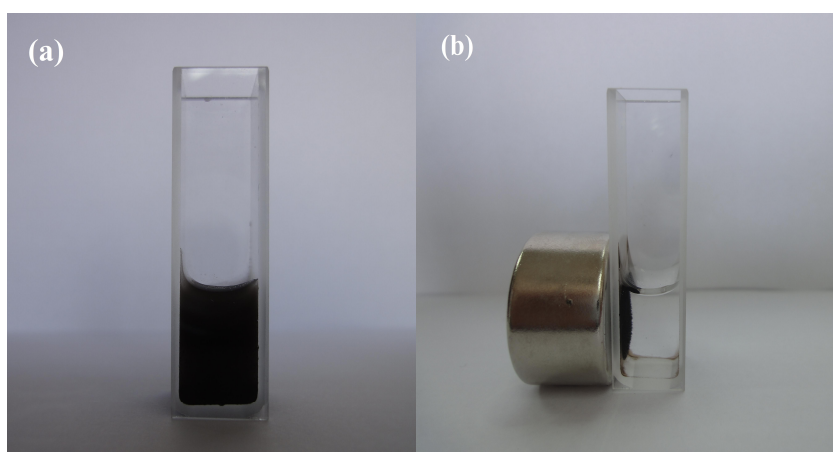


Fig. S2. Overlap of identified phosphopeptides (a) and phosphoprotein groups (b) from the tryptic digest of rat liver mitochondria enriched by conventional TiO₂ beads and Ti⁴⁺-ATP-MNPs.

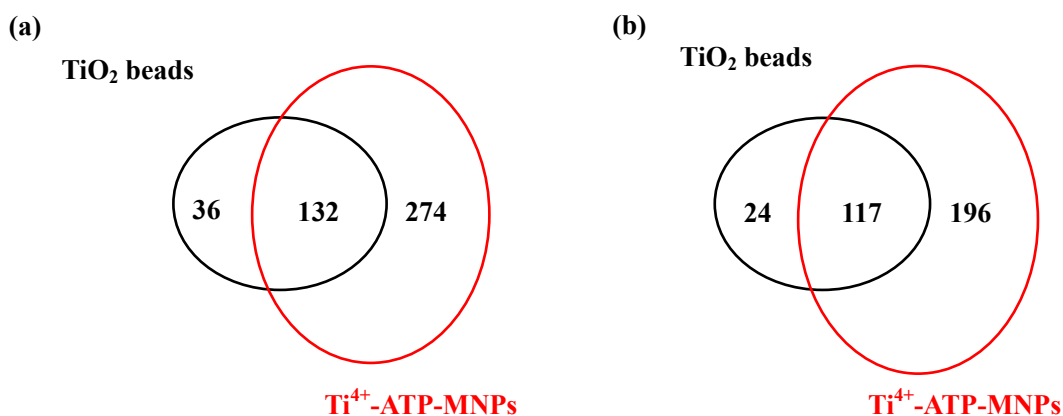


Table S1 List of phosphopeptides enriched by Ti^{4+} -ATP-MNPs, conventional TiO_2 and Ti^{4+} -IMAC beads from the tryptic digest mixture of β -casein and BSA.

No	[MH ⁺]	Number of phosphorylation sites							Protein	Peptide sequence ^a
		TiO ₂ beads	Ti ⁴⁺ -IMAC beads		Ti ⁴⁺ -ATP-MNPs					
		1:500	1:500	1:500	1:1000	1:5000				
1	1660	✓			✓			αS1-casein	VPQLEIVPN[pS]AEER	
2	1927				✓	✓		αS1-casein	DIG[pS]E[pS]TEDQAMEDIK	
3	1943				✓			αS1-casein	DIG[pS]E[pS]TEDQA[Mo]JEDIK ^b	
4	1951					✓		αS1-casein	YKVPQLEIVPN[pS]AEER	
5	2061	✓		✓	✓	✓	✓	β-casein	FQ[pS]EEQQQTEDELQDK	
6	2083							αS1-casein	KKYKVPQLEIVPN[pS]AEERL	
7	2432				✓	✓	✓	β-casein	IEKFQ[pS]EEQQQTEDELQDK	
8	2556	✓			✓	✓	✓	β-casein	FQ[pS]EEQQQTEDELQDKIHPF	
9	2954					✓	✓	αS1-casein	KEKVNEL[pS]KDIG[pS]E[pS]TEDQA[Mo]JEDIKQ	
10	3008				✓	✓		αS2-casein	NANEEYSIG[pS][pS][pS]EE[pS]AEVATEEVK	
11	3122	✓		✓	✓	✓	✓	β-casein	RELEELNVPGEIVE[pS]L[pS][pS] [pS]EESITR	

^apS, phosphorylated site. The amino acid sequences were cited from Zhao L., et al⁷ and Eriksson A. et al⁸. ^bOxidation on methionine.

Table S2 List of phosphopeptides identified by Ti^{4+} -ATP-MNPs from the tryptic digest of rat liver mitochondria.

Material		Ti^{4+} -ATP-MNPs				
Order	Sequence	Spectrum	Score	Calc_M	Modification	Proteins
1	AAAQDINPADDPNNQGEDEFEEAEQVRE ENLPEESEER	TiATPMNP1.11260.11260.3.dta	122.1	4391.80	35,S(PhosphoST);	IPI:IPI00368095.3
		TiATPMNP2.11712.11712.3.dta	98.87	4391.80	35,S(PhosphoST);	IPI:IPI00368095.3
		TiATPMNP3.11548.11548.3.dta	87.69	4391.80	35,S(PhosphoST);	IPI:IPI00368095.3
2	AAAQDINPADDPNNQGEDEFEEAEQVRE ENLPEESEERK					
		TiATPMNP2.11441.11441.3.dta	70.42	4519.89	35,S(PhosphoST);	IPI:IPI00368095.3
3	AAEEAFVNDIDESSPGTEWER	TiATPMNP3.12327.12327.2.dta	69.84	2429.98	14,S(PhosphoST);	IPI:IPI00230870.1
4	AAENNSGVESSGYGSPGPTWDR					
		TiATPMNP1.8519.8519.2.dta	95.57	2402.95	16,S(PhosphoST);	IPI:IPI00947663.1
5	YTDQSGEEEEEDYESEEQIQR	TiATPMNP3.9152.9152.2.dta	95.07	2402.95	16,S(PhosphoST);	IPI:IPI00947663.1
		TiATPMNP1.7633.7633.3.dta	59.99	2679.00	5,S(PhosphoST);	IPI:IPI00365149.2
6	AAQASLSALNDPSAVEQALQEK					
		TiATPMNP3.13381.13381.2.dta	107.84	2319.09	5,S(PhosphoST);	IPI:IPI00195904.3
7	AAQLQGSPAPEKGEVLGDALQLDTLK	TiATPMNP2.13602.13602.2.dta	67.03	2319.09	5,S(PhosphoST);	IPI:IPI00195904.3
		TiATPMNP3.13690.13690.3.dta	52.91	2727.36	7,S(PhosphoST);	IPI:IPI00368473.3
8	AASPPASASDLIEQQQK	TiATPMNP3.9417.9417.2.dta	106.35	1818.83	3,S(PhosphoST);	IPI:IPI00393379.4

9	AAVQELSGSILTS	EDPEER	TiATPMNP2.9603.9603.2.dta	85.6	1818.83	3,S(PhosphoST);	IPI:IPI00393379.4
			TiATPMNP1.8835.8835.2.dta	72.4	1818.83	3,S(PhosphoST);	IPI:IPI00393379.4
			TiATPMNP3.11469.11469.2.dta	68.24	2108.94	12,T(PhosphoST);	IPI:IPI00326970.1
			TiATPMNP1.10670.10670.2.dta	53.66	2188.91	9,S(PhosphoST); 12,T(PhosphoST);	IPI:IPI00326970.1
10	ADAPDAGAQSDSELPSYHQNDVSLDR		TiATPMNP2.9806.9806.3.dta	73.91	2836.17	10,S(PhosphoST);	IPI:IPI00390323.4
			TiATPMNP3.9629.9629.3.dta	70.75	2836.17	10,S(PhosphoST);	IPI:IPI00390323.4
			TiATPMNP1.9320.9320.3.dta	62.61	2836.17	10,S(PhosphoST);	IPI:IPI00390323.4
11	VAAVDDSDYQTEYEEELPAIPK		TiATPMNP1.12549.12549.2.dta	117.63	2689.15	8,S(PhosphoST);	IPI:IPI00200760.7
			TiATPMNP2.13023.13023.2.dta	99.14	2689.15	8,S(PhosphoST);	IPI:IPI00200760.7
			TiATPMNP3.12896.12896.2.dta	92.58	2689.15	8,S(PhosphoST);	IPI:IPI00200760.7
12	ADSDQDSKMSFKEIK		TiATPMNP2.10706.10706.2.dta	43.35	1806.76	10,S(PhosphoST);	IPI:IPI00560332.2
13	AEALTSLHGDDQDSEDEVLTIPVK		TiATPMNP2.13076.13076.2.dta	63.68	2789.24	14,S(PhosphoST);	IPI:IPI00332022.6
14	AEEPSEEEADAPKPK		TiATPMNP2.7768.7768.2.dta	64.58	1704.70	5,S(PhosphoST);	IPI:IPI00198801.3
			TiATPMNP2.7781.7781.3.dta	52.46	1704.70	5,S(PhosphoST);	IPI:IPI00198801.3
15	AEQSLHDLQER		TiATPMNP2.8211.8211.2.dta	59.8	1403.60	4,S(PhosphoST);	IPI:IPI00365792.3
16	AESPETSAVESTQSTPQK		TiATPMNP2.8132.8132.2.dta	97.3	1954.83	3,S(PhosphoST);	IPI:IPI00562353.4
17	AESSDSGAEEEEAAQEELK						

18	YGPVSVADTTGSGAADA KDDDDIDLFGS DDEESED	TiATPMNP2.9491.9491.2.dta	71.97	2231.84	6,S(PhosphoST);	IPI:IPI00768827.3
19	AFLSPPTLLEGLR	TiATPMNP2.12757.12757.3.dta	124.65	3984.58	28,S(PhosphoST);	IPI:IPI00476899.1
		TiATPMNP1.12234.12234.3.dta	111.6	3984.58	28,S(PhosphoST);	IPI:IPI00476899.1
		TiATPMNP2.12777.12777.3.dta	97.96	3984.58	34,S(PhosphoST);	IPI:IPI00476899.1
		TiATPMNP3.12694.12694.3.dta	87.81	3984.58	28,S(PhosphoST);	IPI:IPI00476899.1
		TiATPMNP2.16810.16810.2.dta	64.52	1588.81	4,S(PhosphoST);	IPI:IPI00365808.4
20	AGEEDEGDVDSWDHETSAK	TiATPMNP3.16540.16540.2.dta	64.31	1588.81	4,S(PhosphoST);	IPI:IPI00365808.4
		TiATPMNP1.16209.16209.2.dta	54.37	1588.81	4,S(PhosphoST);	IPI:IPI00365808.4
		TiATPMNP1.8201.8201.2.dta	106.32	2269.81	11,S(PhosphoST);	IPI:IPI00366877.5
		TiATPMNP2.9090.9090.2.dta	105.91	2269.81	11,S(PhosphoST);	IPI:IPI00366877.5
		TiATPMNP3.8907.8907.2.dta	103.35	2269.81	11,S(PhosphoST);	IPI:IPI00366877.5
21	VLGPSSSENQEGTLTDSMK	TiATPMNP1.8219.8219.3.dta	86.13	2269.81	11,S(PhosphoST);	IPI:IPI00366877.5
		TiATPMNP2.9091.9091.3.dta	80.43	2269.81	11,S(PhosphoST);	IPI:IPI00366877.5
		TiATPMNP3.8906.8906.3.dta	64.78	2269.81	11,S(PhosphoST);	IPI:IPI00366877.5
		TiATPMNP3.9539.9539.2.dta	93.98	2057.87	6,S(PhosphoST);	IPI:IPI00199060.2
		TiATPMNP1.9099.9099.2.dta	88.38	2057.87	6,S(PhosphoST);	IPI:IPI00199060.2
		TiATPMNP2.8735.8735.2.dta	86.53	2073.87	6,S(PhosphoST); 18,M(OxidationM);	IPI:IPI00199060.2
		TiATPMNP3.8552.8552.2.dta	78.62	2073.87	6,S(PhosphoST); 18,M(OxidationM);	IPI:IPI00199060.2
		TiATPMNP2.9741.9741.2.dta	74.85	2057.87	6,S(PhosphoST);	IPI:IPI00199060.2

22	AI SPPHPDGTSSSTESTIPEK	TiATPMNP2.9870.9870.2.dta	62.84	2057.87	5,S(PhosphoST);	IPI:IPI00199060.2
23	AIYQGPSPDKS	TiATPMNP1.8169.8169.3.dta	54.36	2128.94	3,S(PhosphoST);	IPI:IPI00369769.3
24	AKPAAQSEEEETAASPAASPTPQSAQEPSA PGK	TiATPMNP2.8042.8042.2.dta	54.94	1327.56	8,S(PhosphoST);	IPI:IPI00210280.1
25	AKPSPAPSPTISAPDASGPQK	TiATPMNP2.7982.7982.3.dta	119.86	3249.40	14,S(PhosphoST); 18,S(PhosphoST);	IPI:IPI00363771.3
		TiATPMNP3.7922.7922.3.dta	87.01	3169.43	14,S(PhosphoST);	IPI:IPI00363771.3
		TiATPMNP3.7745.7745.3.dta	67.29	3249.40	14,S(PhosphoST); 18,S(PhosphoST);	IPI:IPI00363771.3
26	AKSPQPPVEEEDHFDFTVVCLDTYNCD LHFK	TiATPMNP3.8218.8218.2.dta	65.45	2161.96	8,S(PhosphoST); 10,T(PhosphoST);	IPI:IPI00371516.3
27	ALEEEEEQVGQAEHLEEEHDPSEEQD R	TiATPMNP1.13751.13751.3.dta	88.93	3912.64	3,S(PhosphoST);	IPI:IPI00210090.3
		TiATPMNP3.14034.14034.3.dta	78.65	3912.64	3,S(PhosphoST);	IPI:IPI00210090.3
		TiATPMNP2.14334.14334.3.dta	76.61	3912.64	3,S(PhosphoST);	IPI:IPI00210090.3
28	ALHSEHAVDTHSDSEEEELAAFCPQLDDSD	TiATPMNP1.10707.10707.3.dta	56.8	3497.40	23,S(PhosphoST);	IPI:IPI00368095.3
		TiATPMNP3.11045.11045.3.dta	54.47	3497.40	23,S(PhosphoST);	IPI:IPI00368095.3
		TiATPMNP2.11240.11240.3.dta	49.32	3497.40	23,S(PhosphoST);	IPI:IPI00368095.3

TVAR

29	ANSFVGTAAQYVSPPELLTEK	TiATPMNP1.11664.11664.3.dta	102.41	3695.50	12,S(PhosphoST); 14,S(PhosphoST);	IPI:IPI00372929.2
30	YQDEVFGGFVTEPQEESEEEVEEPEER	TiATPMNP2.12279.12279.3.dta	82.83	3695.50	12,S(PhosphoST); 14,S(PhosphoST);	IPI:IPI00372929.2
31	VLEPSETLTIVSETPTTEVHPEPSPSTMDFP ESSTTDVQR	TiATPMNP2.12188.12188.3.dta	80.5	3695.50	10,T(PhosphoST); 14,S(PhosphoST);	IPI:IPI00372929.2
		TiATPMNP1.13017.13017.2.dta	68.36	2132.00	3,S(PhosphoST);	IPI:IPI00195987.1
		TiATPMNP1.12924.12924.2.dta	53.57	3294.32	17,S(PhosphoST);	IPI:IPI00193648.3
		TiATPMNP2.13421.13421.3.dta	48.38	3294.32	17,S(PhosphoST);	IPI:IPI00193648.3
		TiATPMNP1.14113.14113.3.dta	103.58	4347.97	23,S(PhosphoST);	IPI:IPI00421709.5
		TiATPMNP3.14385.14385.3.dta	98.73	4347.97	23,S(PhosphoST);	IPI:IPI00421709.5
		TiATPMNP2.14570.14570.3.dta	94.91	4347.97	23,S(PhosphoST);	IPI:IPI00421709.5
		TiATPMNP1.14161.14161.3.dta	62.64	4347.97	25,S(PhosphoST);	IPI:IPI00421709.5
32	AQRLSQETALGR	TiATPMNP3.8760.8760.2.dta	64.36	1536.72	5,S(PhosphoST);	IPI:IPI00205022.1
		TiATPMNP2.8966.8966.2.dta	49.14	1536.72	5,S(PhosphoST);	IPI:IPI00205022.1
33	ARESPVHSICSELF	TiATPMNP3.13131.13131.2.dta	46.97	1737.73	4,S(PhosphoST);	IPI:IPI00231745.8
34	ASPALGSGPDGSGDSLEMSSLDR	TiATPMNP1.9169.9169.2.dta	156.53	2299.94	2,S(PhosphoST); 18,M(OxidationM);	IPI:IPI00417750.3

35	ATWGDGDS SP SNVVSK	TiATPMNP2.11180.11180.2.dta	144.43	2283.94	2,S(PhosphoST);	IPI:IPI00417750.3
		TiATPMNP3.10960.10960.2.dta	133.82	2283.94	2,S(PhosphoST);	IPI:IPI00417750.3
		TiATPMNP1.10601.10601.2.dta	133.49	2283.94	2,S(PhosphoST);	IPI:IPI00417750.3
		TiATPMNP3.9611.9611.2.dta	123.15	2299.94	2,S(PhosphoST);	IPI:IPI00417750.3
					18,M(OxidationM);	
		TiATPMNP2.9775.9775.2.dta	105.85	2299.94	2,S(PhosphoST);	IPI:IPI00417750.3
					18,M(OxidationM);	
		TiATPMNP1.10547.10547.3.dta	79.77	2283.94	2,S(PhosphoST);	IPI:IPI00417750.3
		TiATPMNP1.9194.9194.3.dta	72.35	2299.94	2,S(PhosphoST);	IPI:IPI00417750.3
					18,M(OxidationM);	
36	AVPIA VADEGESESEDDDLKPR	TiATPMNP3.10903.10903.3.dta	64.01	2283.94	2,S(PhosphoST);	IPI:IPI00417750.3
		TiATPMNP2.11104.11104.3.dta	56.21	2283.94	2,S(PhosphoST);	IPI:IPI00417750.3
		TiATPMNP2.9804.9804.3.dta	55.53	2299.94	2,S(PhosphoST);	IPI:IPI00417750.3
					18,M(OxidationM);	
		TiATPMNP1.10574.10574.2.dta	52.08	2283.94	7,S(PhosphoST);	IPI:IPI00417750.3
		TiATPMNP3.8707.8707.2.dta	115.13	1741.71	10,S(PhosphoST);	IPI:IPI00197605.2
		TiATPMNP2.8938.8938.2.dta	107.53	1741.71	10,S(PhosphoST);	IPI:IPI00197605.2
		TiATPMNP2.10156.10156.2.dta	42.38	2500.02	12,S(PhosphoST);	IPI:IPI00869542.1
37	CEADETPSK				14,S(PhosphoST);	
		TiATPMNP3.4348.4348.3.dta	50.2	1114.38	8,S(PhosphoST);	IPI:IPI00370422.5
38	CGSGPVHISGQH LVAVEEDA ESEDEDEED VK					
		TiATPMNP1.10191.10191.3.dta	77.52	3444.41	22,S(PhosphoST);	IPI:IPI00197553.1

39	DAPPGAAAAPGGPGGGGGLSPEPSD R	TiATPMNP2.10744.10744.3.dta	70.19	3444.41	22,S(PhosphoST);	IPI:IPI00197553.1
		TiATPMNP3.19368.19368.3.dta	55.2	3444.41	22,S(PhosphoST);	IPI:IPI00197553.1
40	DCGVFTCPNSSFTDLAEIVSR	TiATPMNP2.8604.8604.3.dta	87.75	2552.07	27,S(PhosphoST);	IPI:IPI00363941.1
		TiATPMNP3.8484.8484.3.dta	86.07	2552.07	27,S(PhosphoST);	IPI:IPI00363941.1
41	DDDDIDLFGSDDEEESEDAKR	TiATPMNP1.15515.15515.2.dta	113.72	2453.02	11,S(PhosphoST);	IPI:IPI00200760.7
		TiATPMNP2.16037.16037.2.dta	106.85	2453.02	11,S(PhosphoST);	IPI:IPI00200760.7
42	DDGDEEGLLTHSEEELEHSQDTDAEDGA LQ	TiATPMNP1.10894.10894.3.dta	53.31	2492.91	10,S(PhosphoST);	IPI:IPI00476899.1
		TiATPMNP2.10882.10882.3.dta	49.24	3362.30	10,T(PhosphoST);	IPI:IPI00373147.2
43	WDAPDDELNDSSAR	TiATPMNP3.9342.9342.2.dta	75.4	1870.68	12,S(PhosphoST);	IPI:IPI00187628.5
		TiATPMNP2.9493.9493.2.dta	60.07	1870.68	12,S(PhosphoST);	IPI:IPI00187628.5
44	WLDESDAEMELR	TiATPMNP3.19170.19170.2.dta	89.23	1571.61	5,S(PhosphoST);	IPI:IPI00766722.1
		TiATPMNP2.13550.13550.2.dta	79.86	1571.61	5,S(PhosphoST);	IPI:IPI00766722.1
		TiATPMNP1.12502.12502.2.dta	76.53	1571.61	5,S(PhosphoST);	IPI:IPI00766722.1
		TiATPMNP3.11927.11927.2.dta	64.78	1587.60	5,S(PhosphoST);	IPI:IPI00766722.1
		TiATPMNP1.11553.11553.2.dta	62.95	1587.60	9,M(OxidationM); 5,S(PhosphoST);	IPI:IPI00766722.1
		TiATPMNP2.12078.12078.2.dta	61	1587.60	9,M(OxidationM); 5,S(PhosphoST);	IPI:IPI00766722.1

45	WRSLQQLAEEER						9,M(OxidationM);		
		TiATPMNP3.10802.10802.2.dta	59.64	1493.69	3,S(PhosphoST);	IPI:IPI00209258.5			
		TiATPMNP1.10425.10425.2.dta	55.52	1493.69	3,S(PhosphoST);	IPI:IPI00209258.5			
		TiATPMNP2.11049.11049.2.dta	52.9	1493.69	3,S(PhosphoST);	IPI:IPI00209258.5			
46	WVEENVPSVTDVALPALLDSEER								
		TiATPMNP1.15395.15395.2.dta	121.78	2848.29	21,S(PhosphoST);	IPI:IPI00958972.1			
		TiATPMNP2.15844.15844.3.dta	68.16	2848.29	21,S(PhosphoST);	IPI:IPI00958972.1			
		TiATPMNP1.15298.15298.3.dta	60.1	2848.29	21,S(PhosphoST);	IPI:IPI00958972.1			
47	YGPVSVADTTGSGAADAkakDDDDIDLFGS DDEESEDakR								
		TiATPMNP2.12348.12348.3.dta	133.63	4140.68	28,S(PhosphoST);	IPI:IPI00476899.1			
		TiATPMNP1.12041.12041.3.dta	124.29	4140.68	28,S(PhosphoST);	IPI:IPI00476899.1			
		TiATPMNP3.12266.12266.3.dta	82.67	4140.68	28,S(PhosphoST);	IPI:IPI00476899.1			
48	YHGHSMSDPGVSYR								
		TiATPMNP3.7967.7967.3.dta	59.66	1670.64	5,S(PhosphoST);	IPI:IPI00191707.4			
		TiATPMNP2.8212.8212.3.dta	48.96	1670.64	5,S(PhosphoST);	IPI:IPI00191707.4			
49	YQASTSNTVSKLLEK								
		TiATPMNP1.13798.13798.2.dta	49.32	1746.83	4,S(PhosphoST);	IPI:IPI00362416.3			
50	DDIFSSSEEGKDR								
		TiATPMNP3.8536.8536.2.dta	49.84	1691.64	7,S(PhosphoST);	IPI:IPI00551751.4			
		TiATPMNP2.9131.9131.2.dta	43.94	1771.61	6,S(PhosphoST);	IPI:IPI00551751.4			
					7,S(PhosphoST);				
51	DDISEIQSLASDHVR								
		TiATPMNP1.11041.11041.2.dta	53.93	1849.80	8,S(PhosphoST);	IPI:IPI00870042.1			
52	DEILPTTPISEKQ								

53	VQGEAVSNIQENTQTPTVQEESEEEVDE TGVEVK	TiATPMNP1.9315.9315.2.dta	74.78	1548.72	7, T(PhosphoST);	IPI:IPI00195999.1
		TiATPMNP2.10022.10022.2.dta	73.68	1548.72	7, T(PhosphoST);	IPI:IPI00195999.1
		TiATPMNP3.9811.9811.2.dta	65.44	1548.72	7, T(PhosphoST);	IPI:IPI00195999.1
54	VRPPRSPSPSPSPK	TiATPMNP2.10667.10667.3.dta	68.76	3938.72	22, S(PhosphoST);	IPI:IPI00371266.1
		TiATPMNP2.7653.7653.2.dta	56.63	1830.83	6, S(PhosphoST); 8, S(PhosphoST);	IPI:IPI00363558.1
55	VSEEAESQQWDTSKGDQVSQNGLP AEQ GSPR	TiATPMNP1.8827.8827.3.dta	65.65	3422.48	19, S(PhosphoST);	IPI:IPI00373419.3
		TiATPMNP2.9404.9404.3.dta	65.19	3422.48	19, S(PhosphoST);	IPI:IPI00373419.3
		TiATPMNP3.9216.9216.3.dta	53.18	3422.48	19, S(PhosphoST);	IPI:IPI00373419.3
56	VSVVEPGNFIAATSLYSER	TiATPMNP2.14085.14085.2.dta	103.07	2214.05	14, S(PhosphoST);	IPI:IPI00480620.1
		TiATPMNP3.13925.13925.2.dta	94.57	2214.05	14, S(PhosphoST);	IPI:IPI00480620.1
		TiATPMNP1.13581.13581.2.dta	91.76	2214.05	13, T(PhosphoST);	IPI:IPI00480620.1
57	WAHDKFSGEEGEIEDDESGTENR	TiATPMNP2.14090.14090.2.dta	91.68	2214.05	13, T(PhosphoST);	IPI:IPI00480620.1
		TiATPMNP3.13911.13911.2.dta	86.63	2214.05	13, T(PhosphoST);	IPI:IPI00480620.1
		TiATPMNP1.9014.9014.3.dta	60.86	2715.05	7, S(PhosphoST);	IPI:IPI00359323.1
58	DFQDIQQLDSEENDHQLIGDEEQGSHVQ NLR	TiATPMNP3.11903.11903.3.dta	93.96	3714.60	10, S(PhosphoST);	IPI:IPI00202913.1
		TiATPMNP2.12099.12099.3.dta	93.11	3714.60	10, S(PhosphoST);	IPI:IPI00202913.1

59	DGELPVEDDDIDLSDELDDLEK	TiATPMNP1.11644.11644.3.dta	89.78	3714.60	10,S(PhosphoST);	IPI:IPI00202913.1
60	DGELPVEDDDIDLSDELDDLEKDEL	TiATPMNP1.15151.15151.2.dta	67.71	2551.09	13,S(PhosphoST);	IPI:IPI00365929.1
		TiATPMNP1.16527.16527.2.dta	98.01	2908.24	13,S(PhosphoST);	IPI:IPI00365929.1
		TiATPMNP2.17011.17011.2.dta	96	2908.24	13,S(PhosphoST);	IPI:IPI00365929.1
		TiATPMNP3.17527.17527.2.dta	45.68	2908.24	13,S(PhosphoST);	IPI:IPI00365929.1
61	DGKEDETSTDVDEKPK	TiATPMNP3.6194.6194.2.dta	45.48	1870.76	9,T(PhosphoST);	IPI:IPI00214787.1
62	DGQDAIAQSPEKEAK	TiATPMNP2.7830.7830.2.dta	68.68	1664.72	9,S(PhosphoST);	IPI:IPI00196639.3
63	DGSEQTDEEAEGPFSDDDEMVTBK	TiATPMNP1.9284.9284.3.dta	74.58	2630.97	15,S(PhosphoST);	IPI:IPI00371862.4
		TiATPMNP1.9726.9726.3.dta	72.62	2630.97	6,T(PhosphoST);	IPI:IPI00371862.4
		TiATPMNP2.9921.9921.3.dta	71.06	2630.97	15,S(PhosphoST);	IPI:IPI00371862.4
		TiATPMNP2.10358.10358.3.dta	69.64	2630.97	6,T(PhosphoST);	IPI:IPI00371862.4
64	DGTAPPPQSPSPGSGQDEDSDEESPR	TiATPMNP1.7956.7956.2.dta	69.65	2990.16	22,S(PhosphoST);	IPI:IPI00199145.3
		TiATPMNP2.8796.8796.3.dta	60.38	2990.16	26,S(PhosphoST);	IPI:IPI00199145.3
65	DIDPELPSDEYFEPVDPEYQGK	TiATPMNP1.13090.13090.2.dta	92.72	2660.10	8,S(PhosphoST);	IPI:IPI00762951.2
		TiATPMNP2.13596.13596.2.dta	83.11	2660.10	8,S(PhosphoST);	IPI:IPI00762951.2
66	DKSPVREPIDNLTPEER	TiATPMNP1.8725.8725.3.dta	56.17	2072.97	3,S(PhosphoST);	IPI:IPI00555302.1
		TiATPMNP1.8780.8780.2.dta	54.66	2072.97	3,S(PhosphoST);	IPI:IPI00555302.1
		TiATPMNP2.9435.9435.3.dta	53.6	2072.97	3,S(PhosphoST);	IPI:IPI00555302.1

67	DLGHPVEEDES	GDQEDDDDELDDGDR	TiATPMNP2.9499.9499.2.dta	48.68	2072.97	3,S(PhosphoST);	IPI:IPI00555302.1
	DQDI						
68	DMDEPSPVPN	VEEVTLPK	TiATPMNP2.10108.10108.3.dta	110.73	3594.30	12,S(PhosphoST);	IPI:IPI00324618.3
			TiATPMNP1.9628.9628.3.dta	106.43	3594.30	12,S(PhosphoST);	IPI:IPI00324618.3
69	DVLNPVPVPV	SSPTTTKPSR	TiATPMNP1.11724.11724.2.dta	63.98	2073.91	6,S(PhosphoST);	IPI:IPI00393081.3
			TiATPMNP2.12320.12320.2.dta	45.32	2073.91	6,S(PhosphoST);	IPI:IPI00393081.3
70	DRVEDNSVR	SPR	TiATPMNP3.10230.10230.2.dta	69.25	2169.10	12,S(PhosphoST);	IPI:IPI00765674.2
71	DSSSSSSSSD	SDSGEEHGS	TiATPMNP3.8402.8402.2.dta	46.17	1507.67	10,S(PhosphoST);	IPI:IPI00366920.3
72	DSVINLSESV	EDGPR	TiATPMNP2.7666.7666.3.dta	78.13	2735.97	15,S(PhosphoST);	IPI:IPI00197986.2
73	DTEKISTLN	GLR	TiATPMNP1.10393.10393.2.dta	72.35	1694.73	7,S(PhosphoST);	IPI:IPI00367150.2
			TiATPMNP2.11023.11023.2.dta	64.78	1694.73	7,S(PhosphoST);	IPI:IPI00367150.2
74	VLHAQCHSTP	DSAEDVRK	TiATPMNP2.10512.10512.2.dta	52.37	1424.68	7,T(PhosphoST);	IPI:IPI00567434.1
75	VLHGAQTSDE	EKDF	TiATPMNP2.7728.7728.3.dta	50.77	2127.93	12,S(PhosphoST);	IPI:IPI00327469.1
			TiATPMNP3.8317.8317.2.dta	49.79	1653.68	7,T(PhosphoST);	IPI:IPI00365864.3
			TiATPMNP3.8375.8375.2.dta	48.85	1653.68	8,S(PhosphoST);	IPI:IPI00365864.3
76	VMTIPYQMPA	SSPVICAGGQDR	TiATPMNP2.8686.8686.2.dta	47.06	1653.68	8,S(PhosphoST);	IPI:IPI00365864.3

77	VNLEESTGVENSPTGARPK	TiATPMNP1.11863.11863.2.dta	70.17	2553.13	12,S(PhosphoST);	IPI:IPI00882480.2
		TiATPMNP3.12230.12230.3.dta	66.33	2553.13	13,S(PhosphoST);	IPI:IPI00882480.2
		TiATPMNP1.11910.11910.2.dta	64.56	2553.13	13,S(PhosphoST);	IPI:IPI00882480.2
		TiATPMNP2.12400.12400.2.dta	58.02	2553.13	13,S(PhosphoST);	IPI:IPI00882480.2
		TiATPMNP3.12236.12236.2.dta	50.78	2553.13	13,S(PhosphoST);	IPI:IPI00882480.2
78	VNRPSYGSISLPSAPQPEPSR	TiATPMNP3.8478.8478.2.dta	59.46	2062.95	7,T(PhosphoST);	IPI:IPI00210389.1
		TiATPMNP3.10210.10210.3.dta	53.06	2501.18	5,S(PhosphoST);	IPI:IPI00362939.3
		TiATPMNP2.10693.10693.2.dta	116.35	1953.61	6,S(PhosphoST);	IPI:IPI00365935.3
79	DWEDDSDEDMSNFDR	TiATPMNP1.10065.10065.2.dta	91.32	1953.61	6,S(PhosphoST);	IPI:IPI00365935.3
		TiATPMNP1.8299.8299.2.dta	60.68	1969.61	6,S(PhosphoST);	IPI:IPI00365935.3
					10,M(OxidationM);	
80	DYDEEEQGYDSEKEK	TiATPMNP2.7843.7843.2.dta	68.89	1941.69	11,S(PhosphoST);	IPI:IPI00561254.3
81	VEFAAENYLSGGGPGDGGGGGGTDT GNGGEESEALQLSSR					
82	VEMGTSSQNDVDMSWIPQETLNQINKAS PR	TiATPMNP3.20415.20415.3.dta	50.94	3978.65	25,T(PhosphoST);	IPI:IPI00367327.7
		TiATPMNP1.13814.13814.3.dta	129.25	3469.54	3,M(OxidationM);	IPI:IPI00561555.1
					28,S(PhosphoST);	
		TiATPMNP1.14595.14595.3.dta	121.01	3453.55	28,S(PhosphoST);	IPI:IPI00561555.1
		TiATPMNP3.14685.14685.3.dta	109.19	3453.55	28,S(PhosphoST);	IPI:IPI00561555.1
		TiATPMNP3.14063.14063.3.dta	107.43	3469.54	3,M(OxidationM);	IPI:IPI00561555.1

TiATPMNP2.18514.18514.3.dta	103.96	3453.55	28,S(PhosphoST);	IPI:IPI00561555.1
TiATPMNP2.12834.12834.3.dta	99.91	3485.54	28,S(PhosphoST); 3,M(OxidationM); 13,M(OxidationM);	IPI:IPI00561555.1
TiATPMNP3.12683.12683.3.dta	99.54	3485.54	28,S(PhosphoST); 3,M(OxidationM); 13,M(OxidationM);	IPI:IPI00561555.1
TiATPMNP1.12773.12773.3.dta	95.27	3469.54	28,S(PhosphoST); 13,M(OxidationM);	IPI:IPI00561555.1
TiATPMNP3.13076.13076.3.dta	94.39	3469.54	28,S(PhosphoST); 13,M(OxidationM);	IPI:IPI00561555.1
TiATPMNP3.18031.18031.3.dta	93	3453.55	28,S(PhosphoST);	IPI:IPI00561555.1
TiATPMNP2.17376.17376.3.dta	86.86	3453.55	20,T(PhosphoST);	IPI:IPI00561555.1
TiATPMNP2.13311.13311.3.dta	84.85	3469.54	20,T(PhosphoST); 13,M(OxidationM);	IPI:IPI00561555.1
TiATPMNP1.14590.14590.3.dta	80.73	3453.55	28,S(PhosphoST);	IPI:IPI00561555.1
TiATPMNP2.14389.14389.3.dta	76.03	3469.54	20,T(PhosphoST); 3,M(OxidationM);	IPI:IPI00561555.1
TiATPMNP1.14130.14130.3.dta	53.4	3469.54	20,T(PhosphoST); 3,M(OxidationM);	IPI:IPI00561555.1
TiATPMNP2.14184.14184.3.dta	51.12	3469.54	20,T(PhosphoST); 3,M(OxidationM); 28,S(PhosphoST);	IPI:IPI00561555.1
TiATPMNP1.14394.14394.3.dta	77.97	3456.52	25,S(PhosphoST);	IPI:IPI00364884.1

83 VEMGTSSQNDVDMSWIPQETLNQISAGR
ER

84	VGVSGDSAGGNLTAAVTQQILQDPPDVK	TiATPMNP3.24453.24453.3.dta	66.61	3456.52	25,S(PhosphoST);	IPI:IPI00364884.1
		TiATPMNP2.14617.14617.3.dta	57.9	3456.52	25,S(PhosphoST);	IPI:IPI00364884.1
		TiATPMNP1.15988.15988.2.dta	58.88	2718.30	13,T(PhosphoST);	IPI:IPI00215009.6
		TiATPMNP1.15973.15973.2.dta	50.29	2718.30	4,S(PhosphoST);	IPI:IPI00215009.6
		TiATPMNP2.16527.16527.2.dta	42.73	2718.30	7,S(PhosphoST);	IPI:IPI00215009.6
85	VHGHSDDEEEEQPR	TiATPMNP2.7207.7207.3.dta	61.57	1884.70	5,S(PhosphoST);	IPI:IPI00192480.2
86	VLEIPDRDSEEELEHVIEQIAYR	TiATPMNP1.17075.17075.3.dta	75.82	2860.34	9,S(PhosphoST);	IPI:IPI00231379.2
		TiATPMNP2.17569.17569.3.dta	65.93	2860.34	9,S(PhosphoST);	IPI:IPI00231379.2
87	VLGPSSSENQEGTLTDSMKDEK	TiATPMNP3.9308.9308.2.dta	84	2430.04	6,S(PhosphoST);	IPI:IPI00199060.2
		TiATPMNP2.9474.9474.2.dta	72.93	2430.04	6,S(PhosphoST);	IPI:IPI00199060.2
		TiATPMNP1.8889.8889.2.dta	51.69	2430.04	6,S(PhosphoST);	IPI:IPI00199060.2
		TiATPMNP2.7912.7912.2.dta	86.74	1999.83	12,S(PhosphoST);	IPI:IPI00327469.1
88	VLHAQCHSTPDSAEDVR					
89	DYEEVGADSAEGDDEGEYY	TiATPMNP1.8107.8107.2.dta	59.13	2156.70	9,S(PhosphoST);	IPI:IPI00364046.2
90	EAGVVHSDAEKDDQEEEEQKQETEAR	TiATPMNP2.7948.7948.3.dta	60.12	2949.24	7,S(PhosphoST);	IPI:IPI00370658.1
		TiATPMNP3.9089.9089.2.dta	60.92	1870.91	8,S(PhosphoST);	IPI:IPI00200898.3
91	EALVEPASESPRPALAR	TiATPMNP3.9078.9078.3.dta	55.72	1870.91	10,S(PhosphoST);	IPI:IPI00200898.3
		TiATPMNP2.7535.7535.3.dta	61.07	2287.90	7,S(PhosphoST);	IPI:IPI00206094.6
92	EDEEGTSDGADKPPHPDASQK					

93	EDEISPPPPNPVVVK	TiATPMNP1.8364.8364.2.dta	90.73	1595.74	5,S(PhosphoST);	IPI:IPI00231770.5
		TiATPMNP2.9192.9192.2.dta	67.38	1595.74	5,S(PhosphoST);	IPI:IPI00231770.5
		TiATPMNP3.9084.9084.2.dta	64.1	1595.74	5,S(PhosphoST);	IPI:IPI00231770.5
94	EEASDDDDMEGDEAVVR	TiATPMNP2.8756.8756.2.dta	88.49	1844.65	4,S(PhosphoST);	IPI:IPI00373118.3
		TiATPMNP3.8476.8476.2.dta	86.51	1844.65	4,S(PhosphoST);	IPI:IPI00373118.3
95	EEEDALQEALAEIFEDSDGEEGDKLQR	TiATPMNP1.18540.18540.3.dta	76.46	3143.32	17,S(PhosphoST);	IPI:IPI00361158.1
96	EELASDLEEMATSSISVPK	TiATPMNP1.16653.16653.2.dta	75.99	2113.93	5,S(PhosphoST);	IPI:IPI00357923.3
		TiATPMNP2.17145.17145.2.dta	54.22	2113.93	5,S(PhosphoST);	IPI:IPI00357923.3
		TiATPMNP3.17021.17021.2.dta	51.5	2113.93	5,S(PhosphoST);	IPI:IPI00357923.3
97	EELEQQTDGDCDEEDDDKDGEMPK	TiATPMNP2.7893.7893.3.dta	88.35	2921.01	7,T(PhosphoST);	IPI:IPI00382218.1
		TiATPMNP2.8239.8239.3.dta	87.17	2905.02	22,M(OxidationM);	IPI:IPI00382218.1
		TiATPMNP3.8134.8134.3.dta	63.49	2905.02	7,T(PhosphoST);	IPI:IPI00382218.1
98	EENLPEESEER	TiATPMNP2.8092.8092.2.dta	54.54	1438.54	8,S(PhosphoST);	IPI:IPI00368095.3
99	EENLPEESEERK	TiATPMNP2.7907.7907.2.dta	48.11	1566.63	8,S(PhosphoST);	IPI:IPI00368095.3
100	EEPLSEEEPCSTAVPSPEK	TiATPMNP1.8953.8953.2.dta	66.24	2293.94	5,S(PhosphoST);	IPI:IPI00214536.1
		TiATPMNP2.9535.9535.2.dta	65.46	2293.94	5,S(PhosphoST);	IPI:IPI00214536.1
101	EESESEDDMGFGLFD					

102	EEVASEPEEAAASPITPK	TiATPMNP1.14822.14822.2.dta	52.32	1913.63	6,S(PhosphoST);	IPI:IPI00200145.1
		TiATPMNP2.15852.15852.2.dta	45.02	1913.63	6,S(PhosphoST);	IPI:IPI00200145.1
		TiATPMNP1.8440.8440.2.dta	83.06	1861.81	5,S(PhosphoST);	IPI:IPI00357923.3
		TiATPMNP2.9223.9223.2.dta	78.83	1861.81	5,S(PhosphoST);	IPI:IPI00357923.3
		TiATPMNP3.9062.9062.2.dta	76.19	1861.81	5,S(PhosphoST);	IPI:IPI00357923.3
		TiATPMNP2.8961.8961.2.dta	61.23	1941.78	5,S(PhosphoST);	IPI:IPI00357923.3
					12,S(PhosphoST);	
		TiATPMNP1.8099.8099.2.dta	60.18	1941.78	5,S(PhosphoST);	IPI:IPI00357923.3
					12,S(PhosphoST);	
103	EFDELPSAQR	TiATPMNP3.8666.8666.2.dta	52.95	1356.55	8,S(PhosphoST);	IPI:IPI00190020.4
		TiATPMNP2.9071.9071.2.dta	43.39	1356.55	8,S(PhosphoST);	IPI:IPI00190020.4
104	VEAKEESESEDEDMGFGLFD	TiATPMNP2.15014.15014.2.dta	89.43	2340.87	7,S(PhosphoST);	IPI:IPI00200147.1
		TiATPMNP1.14243.14243.2.dta	84.33	2340.87	7,S(PhosphoST);	IPI:IPI00200147.1
		TiATPMNP1.14455.14455.2.dta	82.98	2420.84	7,S(PhosphoST);	IPI:IPI00200147.1
					10,S(PhosphoST);	
		TiATPMNP2.14826.14826.2.dta	79.32	2340.87	10,S(PhosphoST);	IPI:IPI00200147.1
		TiATPMNP2.13278.13278.2.dta	72.46	2356.87	7,S(PhosphoST);	IPI:IPI00200147.1
					14,M(OxidationM);	
		TiATPMNP2.15227.15227.2.dta	71.2	2420.84	7,S(PhosphoST);	IPI:IPI00200147.1
					10,S(PhosphoST);	
		TiATPMNP1.12643.12643.2.dta	58.03	2356.87	7,S(PhosphoST);	IPI:IPI00200147.1
					14,M(OxidationM);	
		TiATPMNP3.15654.15654.2.dta	57.48	2340.87	7,S(PhosphoST);	IPI:IPI00200147.1

109	EGINPGYDDYADSDQHDAYLER	TiATPMNP1.9681.9681.3.dta	70.53	2865.08	13,S(PhosphoST);	IPI:IPI00231263.3
110	EGQVEAAQPEQAAEAPAESSAQPNQLET GASSPER	TiATPMNP1.8458.8458.3.dta TiATPMNP3.8926.8926.3.dta TiATPMNP3.8922.8922.3.dta TiATPMNP2.9058.9058.3.dta	140.78 120.62 105.44 83.27	3642.58 3642.58 3642.58 3642.58	32,S(PhosphoST); 28,T(PhosphoST); 32,S(PhosphoST); 32,S(PhosphoST);	IPI:IPI00768543.1 IPI:IPI00768543.1 IPI:IPI00768543.1 IPI:IPI00768543.1
111	EHGCSDDDDTDVDVEGLR	TiATPMNP1.8301.8301.2.dta	72.46	2170.79	7,S(PhosphoST);	IPI:IPI00201858.4
112	EKLQEEGGSEEEVVGSPSEDGMQR	TiATPMNP1.7792.7792.3.dta	57.01	2714.08	9,S(PhosphoST);	IPI:IPI00213378.1
113	ELEKPIQSKPQSPVIQATAGSPK	TiATPMNP1.8184.8184.3.dta	67.09	2511.29	21,S(PhosphoST);	IPI:IPI00327389.1
114	ELGSLEEDANPDEEGVQK	TiATPMNP2.9877.9877.2.dta TiATPMNP1.9285.9285.2.dta TiATPMNP3.9687.9687.2.dta	97.18 84.95 78.04	2036.83 2036.83 2036.83	4,S(PhosphoST); 4,S(PhosphoST); 4,S(PhosphoST);	IPI:IPI00914277.1 IPI:IPI00914277.1 IPI:IPI00914277.1
115	ELVGDTGSQEGDNEQPSGEAEEDPSASP HK	TiATPMNP3.8265.8265.3.dta	82.8	3261.30	17,S(PhosphoST);	IPI:IPI00914261.1
116	TSVQTEDDQLIAGQSAR	TiATPMNP1.8384.8384.2.dta TiATPMNP2.9271.9271.2.dta	71.8 61.73	1896.83 1896.83	2,S(PhosphoST); 2,S(PhosphoST);	IPI:IPI00358406.2 IPI:IPI00358406.2
117	TTKMAGLMIAAAWVLSFVLWAPAILFW QFVVGKR					

118	TTQSLQDFPVADSEEEAEEEFQK	TiATPMNP1.15650.15650.3.dta	59.84	3980.03	1,T(PhosphoST); 2,T(PhosphoST);	IPI:IPI00876617.1
119	TVEIPEDEVVRTPR	TiATPMNP1.11526.11526.2.dta TiATPMNP2.12058.12058.2.dta	104.98 91.28	2735.13 2735.13	13,S(PhosphoST); 13,S(PhosphoST);	IPI:IPI00190035.1 IPI:IPI00190035.1
120	ENPPVEDSDEDDRR	TiATPMNP3.9434.9434.2.dta TiATPMNP2.9624.9624.2.dta	50.48 49.83	1717.82 1717.82	12,T(PhosphoST); 12,T(PhosphoST);	IPI:IPI00209277.1 IPI:IPI00209277.1
121	ENVIPLLVTSNSDQFLTPDGDEK	TiATPMNP2.7509.7509.2.dta	51.92	1917.65	8,S(PhosphoST); 9,S(PhosphoST);	IPI:IPI00382320.3
122	ENVIPLLVTSNSDQFLTPDGDEKDITQE NSELK	TiATPMNP1.15053.15053.2.dta TiATPMNP2.15598.15598.2.dta TiATPMNP2.15604.15604.2.dta	81.44 77.74 75.48	2710.25 2710.25 2710.25	12,S(PhosphoST); 12,S(PhosphoST); 10,S(PhosphoST);	IPI:IPI00364726.4 IPI:IPI00364726.4 IPI:IPI00364726.4
123	TVYLSALSSSSSAEK	TiATPMNP1.15150.15150.3.dta	87.78	3867.81	12,S(PhosphoST);	IPI:IPI00364726.4
124	TVYLSALSSSSSAEKFSPHPSPAK	TiATPMNP3.9946.9946.2.dta	47.64	1735.78	11,S(PhosphoST);	IPI:IPI00187663.2
		TiATPMNP1.10602.10602.3.dta TiATPMNP3.10953.10953.3.dta TiATPMNP1.10877.10877.3.dta TiATPMNP3.10937.10937.3.dta TiATPMNP2.11128.11128.3.dta	106.07 84.37 75.46 69.94 53.18	2781.31 2781.31 2781.31 2781.31 2781.31	13,S(PhosphoST); 13,S(PhosphoST); 12,S(PhosphoST); 12,S(PhosphoST); 13,S(PhosphoST);	IPI:IPI00187663.2 IPI:IPI00187663.2 IPI:IPI00187663.2 IPI:IPI00187663.2 IPI:IPI00187663.2

125	TWTLCGTPEYLAPEIILSK	TiATPMNP2.17241.17241.2.dta	113.82	2270.08	3,T(PhosphoST);	IPI:IPI00200013.4
		TiATPMNP1.16684.16684.2.dta	107.76	2270.08	3,T(PhosphoST);	IPI:IPI00200013.4
		TiATPMNP3.16996.16996.2.dta	93.64	2270.08	3,T(PhosphoST);	IPI:IPI00200013.4
126	TWTLCGTPEYLAPEVIQSK					
		TiATPMNP3.16992.16992.2.dta	60.77	2271.04	3,T(PhosphoST);	IPI:IPI00205948.1
127	ESDDKPEIEDVGSDEEEEEKK	TiATPMNP2.8570.8570.2.dta	75.05	2513.99	13,S(PhosphoST);	IPI:IPI00210566.3
		TiATPMNP3.8426.8426.2.dta	68.26	2513.99	13,S(PhosphoST);	IPI:IPI00210566.3
		TiATPMNP3.8407.8407.3.dta	61.85	2513.99	13,S(PhosphoST);	IPI:IPI00210566.3
		TiATPMNP2.8556.8556.3.dta	57.9	2513.99	13,S(PhosphoST);	IPI:IPI00210566.3
		TiATPMNP1.6477.6477.3.dta	56.96	2513.99	13,S(PhosphoST);	IPI:IPI00210566.3
128	ESDDKPEIEDVGSDEEEEEKKDGDK	TiATPMNP2.8539.8539.3.dta	68.69	2929.16	13,S(PhosphoST);	IPI:IPI00210566.3
		TiATPMNP3.8401.8401.3.dta	64.1	2929.16	13,S(PhosphoST);	IPI:IPI00210566.3
129	ESDETVTVALSPK	TiATPMNP2.9423.9423.2.dta	69.05	1453.65	11,S(PhosphoST);	IPI:IPI00421709.5
		TiATPMNP3.9204.9204.2.dta	59.25	1453.65	11,S(PhosphoST);	IPI:IPI00421709.5
130	ESLKEEDESDDDNM	TiATPMNP3.6370.6370.2.dta	45.77	1749.57	9,S(PhosphoST); 14,M(OxidationM);	IPI:IPI00476178.3
131	VDEETQEVLGCLR	TiATPMNP3.10421.10421.2.dta	62.97	1579.70	5,T(PhosphoST);	IPI:IPI00210239.3
		TiATPMNP2.10657.10657.2.dta	52.69	1579.70	5,T(PhosphoST);	IPI:IPI00210239.3
		TiATPMNP1.9985.9985.2.dta	51.57	1579.70	5,T(PhosphoST);	IPI:IPI00210239.3
132	ETSVSKEDTDQEEKASNEVDTK					

133	EVDPTGELQSLQMPSEGPSSLDPSQEG PTGLK	TiATPMNP2.7674.7674.3.dta	53.94	2547.06	16,S(PhosphoST);	IPI:IPI00213638.3
134	VDIITEEMPENALPSDEDDKDPNDPYR	TiATPMNP3.12545.12545.3.dta	64.26	3604.59	22,S(PhosphoST);	IPI:IPI00194561.1
135	EYVNSTSEESHDEDEIRPVQQQDLHR	TiATPMNP2.12383.12383.3.dta	101.13	3195.34	15,S(PhosphoST);	IPI:IPI00198486.4
136	FDTGRASPLSSESPVR	TiATPMNP1.11904.11904.3.dta	87.35	3195.34	15,S(PhosphoST);	IPI:IPI00198486.4
137	FESEEDIDVLAFGK	TiATPMNP1.8287.8287.3.dta	51.49	3218.37	10,S(PhosphoST);	IPI:IPI00382211.1
138	FFTTGSDSESSLSGEELVTKPVSGNYG K	TiATPMNP1.8377.8377.2.dta	46.16	1783.80	7,S(PhosphoST);	IPI:IPI00400736.1
139	FGSADNIPNLK	TiATPMNP2.14421.14421.2.dta	96.79	1676.71	3,S(PhosphoST);	IPI:IPI00957741.1
140	FIDKQQPSGEGEDDDAEALKK	TiATPMNP1.13881.13881.2.dta	83.57	1676.71	3,S(PhosphoST);	IPI:IPI00957741.1
141	FIIGSVSEDNSEDEISNLVK	TiATPMNP3.14237.14237.2.dta	45.75	1676.71	3,S(PhosphoST);	IPI:IPI00957741.1
142		TiATPMNP1.11468.11468.3.dta	103.53	3217.41	10,S(PhosphoST);	IPI:IPI00914189.1
143		TiATPMNP2.11948.11948.3.dta	73.11	3217.41	12,S(PhosphoST);	IPI:IPI00914189.1
144		TiATPMNP1.9770.9770.2.dta	92.47	1253.56	3,S(PhosphoST);	IPI:IPI00568686.2
145		TiATPMNP3.10246.10246.2.dta	82.28	1253.56	3,S(PhosphoST);	IPI:IPI00568686.2
146		TiATPMNP2.10454.10454.2.dta	75.31	1253.56	3,S(PhosphoST);	IPI:IPI00568686.2
147		TiATPMNP1.7832.7832.3.dta	75.88	2671.14	11,S(PhosphoST);	IPI:IPI00359917.1

142	VDPSLMEDSDDGPSLPTK	TiATPMNP1.14044.14044.2.dta	103.02	2273.02	11,S(PhosphoST);	IPI:IPI00194102.3
		TiATPMNP2.14514.14514.2.dta	81.91	2273.02	11,S(PhosphoST);	IPI:IPI00194102.3
		TiATPMNP2.10516.10516.2.dta	64.73	1980.82	9,S(PhosphoST);	IPI:IPI00202231.1
		TiATPMNP1.9946.9946.2.dta	58.21	1980.82	9,S(PhosphoST);	IPI:IPI00202231.1
		TiATPMNP1.8855.8855.2.dta	49.7	1996.81	6,M(OxidationM); 9,S(PhosphoST);	IPI:IPI00202231.1
143	FLENAAADFSEDEDEDIDGR	TiATPMNP2.11352.11352.2.dta	94.01	2450.92	10,S(PhosphoST);	IPI:IPI00188880.1
144	TPEELDDSDFFETEDFDVR	TiATPMNP3.19309.19309.2.dta	125.79	2236.85	8,S(PhosphoST);	IPI:IPI00358406.2
		TiATPMNP1.25441.25441.2.dta	124.5	2236.85	8,S(PhosphoST);	IPI:IPI00358406.2
		TiATPMNP2.16385.16385.2.dta	122.34	2236.85	8,S(PhosphoST);	IPI:IPI00358406.2
		TiATPMNP1.16268.16268.2.dta	90.38	2236.85	1,T(PhosphoST);	IPI:IPI00358406.2
145	TPSLEEGTDGFISSSDIPGTSEK	TiATPMNP3.27879.27879.2.dta	76.31	2236.85	1,T(PhosphoST);	IPI:IPI00358406.2
		TiATPMNP2.12462.12462.2.dta	96.63	2432.04	3,S(PhosphoST);	IPI:IPI00870700.1
		TiATPMNP1.11939.11939.2.dta	91.29	2432.04	3,S(PhosphoST);	IPI:IPI00870700.1
		TiATPMNP3.12306.12306.2.dta	77.23	2432.04	3,S(PhosphoST);	IPI:IPI00870700.1
146	TRSPDVISSASTALSQDIPEIASEALSR	TiATPMNP1.17479.17479.3.dta	58.2	2979.43	12,T(PhosphoST);	IPI:IPI00207643.4
147	TSEGSAGSAGMGSGAGAGVGAGGGG GSGASSGGGAGGLQPSSR	TiATPMNP3.20628.20628.3.dta	54.6	3472.44	43,S(PhosphoST);	IPI:IPI00199604.5
148	TSMGGTQQQFVEGVR	TiATPMNP3.9642.9642.2.dta	72.26	1702.73	2,S(PhosphoST);	IPI:IPI00325912.1

149	FSHNYLSDSDTEAK	TiATPMNP1.9170.9170.2.dta	63.17	1702.73	2,S(PhosphoST);	IPI:IPI00325912.1
		TiATPMNP2.9849.9849.2.dta	54.93	1702.73	2,S(PhosphoST);	IPI:IPI00325912.1
		TiATPMNP3.8893.8893.2.dta	47.87	1718.72	2,S(PhosphoST); 3,M(OxidationM);	IPI:IPI00325912.1
		TiATPMNP2.8829.8829.2.dta	73.37	1691.66	9,S(PhosphoST);	IPI:IPI00568245.2
		TiATPMNP1.8797.8797.2.dta	64.21	1956.80	16,S(PhosphoST);	IPI:IPI00367182.1
		TiATPMNP3.5982.5982.2.dta	67.14	1457.55	11,S(PhosphoST);	IPI:IPI00382218.1
		TiATPMNP2.6439.6439.2.dta	64.27	1457.55	11,S(PhosphoST);	IPI:IPI00382218.1
		TiATPMNP1.11047.11047.3.dta	119.41	3260.26	18,S(PhosphoST);	IPI:IPI00197900.5
		TiATPMNP2.11646.11646.3.dta	112.97	3260.26	18,S(PhosphoST);	IPI:IPI00197900.5
		TiATPMNP1.10943.10943.2.dta	76.96	3260.26	18,S(PhosphoST);	IPI:IPI00197900.5
		TiATPMNP3.11458.11458.3.dta	75.33	3260.26	18,S(PhosphoST);	IPI:IPI00197900.5
		TiATPMNP2.11521.11521.2.dta	59.17	3260.26	18,S(PhosphoST);	IPI:IPI00197900.5
		TiATPMNP1.9357.9357.3.dta	95.44	4049.60	4,S(PhosphoST); 13,T(PhosphoST);	IPI:IPI00199060.2
		TiATPMNP2.9862.9862.3.dta	80.62	4049.60	4,S(PhosphoST); 13,T(PhosphoST);	IPI:IPI00199060.2
		TiATPMNP1.9351.9351.3.dta	77.51	4049.60	5,S(PhosphoST); 13,T(PhosphoST);	IPI:IPI00199060.2
153	GDKSSEPTEDVETKEIEEGDTEPEEGSPL EEENEK					

154	GDMSEDDENEFFDAPEIITMPENLGHK	TiATPMNP1.16033.16033.3.dta	128.52	3273.29	4,S(PhosphoST);	IPI:IPI00870224.2
		TiATPMNP2.16571.16571.3.dta	95.49	3273.29	4,S(PhosphoST);	IPI:IPI00870224.2
		TiATPMNP1.15034.15034.3.dta	91.09	3289.29	4,S(PhosphoST);	IPI:IPI00870224.2
				21,M(OxidationM);		
		TiATPMNP1.15818.15818.3.dta	54.93	3289.29	3,M(OxidationM);	IPI:IPI00870224.2
				4,S(PhosphoST);		
155	TNPSPTNPFSSDAQK	TiATPMNP3.8958.8958.2.dta	65.35	1668.69	4,S(PhosphoST);	IPI:IPI00202443.7
		TiATPMNP2.9186.9186.2.dta	45.32	1668.69	4,S(PhosphoST);	IPI:IPI00202443.7
156	TNTNVNCPICFMPLDVQADRDDDSRE	TiATPMNP1.14135.14135.3.dta	76.91	3174.30	24,S(PhosphoST);	IPI:IPI00200757.1
		TiATPMNP3.14481.14481.3.dta	73.31	3174.30	24,S(PhosphoST);	IPI:IPI00200757.1
		TiATPMNP2.14638.14638.3.dta	60.94	3174.30	24,S(PhosphoST);	IPI:IPI00200757.1
157	GDYTPAPGRDSSQSSDVSLPDCK	TiATPMNP1.8251.8251.3.dta	51.43	2517.02	11,S(PhosphoST);	IPI:IPI00551718.1
158	GEDSAEESDGKPAVVAPPVVVEAVSNPSS VFPSDATTEQGPILTK	TiATPMNP1.14965.14965.3.dta	61.15	4584.16	4,S(PhosphoST);	IPI:IPI00200674.1
159	GENEETLGRPAQPPSAGETPHSPGVEDAP IAK	TiATPMNP2.9216.9216.3.dta	100.93	3316.51	22,S(PhosphoST);	IPI:IPI00373011.3
		TiATPMNP1.8609.8609.3.dta	82.3	3316.51	22,S(PhosphoST);	IPI:IPI00373011.3
		TiATPMNP3.9041.9041.3.dta	72.06	3316.51	22,S(PhosphoST);	IPI:IPI00373011.3
160	GEQFYDRSIEITR	TiATPMNP1.9728.9728.2.dta	57.04	1691.74	8,S(PhosphoST);	IPI:IPI00231099.3

161	GESIEPLDPSEK	TiATPMNP3.10111.10111.2.dta	48.45	1691.74	8,S(PhosphoST);	IPI:IPI00231099.3
		TiATPMNP2.9178.9178.2.dta	63.92	1378.58	3,S(PhosphoST);	IPI:IPI00208301.1
		TiATPMNP3.8811.8811.2.dta	52.39	1378.58	3,S(PhosphoST);	IPI:IPI00208301.1
162	TKPKPPEPEDLAICFTSGTTGNPK	TiATPMNP1.12729.12729.3.dta	51.09	2776.33	21,T(PhosphoST);	IPI:IPI00188989.1
		TiATPMNP3.8986.8986.2.dta	72.31	1640.70	5,T(PhosphoST);	IPI:IPI00198339.4
		TiATPMNP2.9173.9173.2.dta	67.86	1640.70	3,S(PhosphoST);	IPI:IPI00198339.4
		TiATPMNP3.8978.8978.2.dta	60.15	1640.70	3,S(PhosphoST);	IPI:IPI00198339.4
164	TLSSSDTELLVLNSSDPVAEVAIR	TiATPMNP1.15455.15455.2.dta	74.13	2594.26	7,T(PhosphoST);	IPI:IPI00400736.1
		TiATPMNP1.15382.15382.2.dta	65.53	2594.26	5,S(PhosphoST);	IPI:IPI00400736.1
		TiATPMNP1.11425.11425.2.dta	109.26	2398.04	9,S(PhosphoST);	IPI:IPI00762951.2
		TiATPMNP2.11936.11936.2.dta	97.81	2398.04	9,S(PhosphoST);	IPI:IPI00762951.2
		TiATPMNP3.11815.11815.2.dta	74.99	2398.04	9,S(PhosphoST);	IPI:IPI00762951.2
		TiATPMNP2.10634.10634.2.dta	74.72	2414.03	9,S(PhosphoST);	IPI:IPI00762951.2
					13,M(OxidationM);	
		TiATPMNP1.10102.10102.2.dta	65.48	2414.03	9,S(PhosphoST);	IPI:IPI00762951.2
					13,M(OxidationM);	
		TiATPMNP1.10109.10109.2.dta	64.66	2414.03	7,S(PhosphoST);	IPI:IPI00762951.2
					13,M(OxidationM);	
166	GFGDGYNGYGGPGGGNFGGSPGYGGG R	TiATPMNP3.10381.10381.2.dta	92.7	2572.99	21,S(PhosphoST);	IPI:IPI00867934.1

167	GFQGSFEELCR	TiATPMNP2.10645.10645.2.dta	87.69	2572.99	21,S(PhosphoST);	IPI:IPI00867934.1
		TiATPMNP1.10050.10050.3.dta	64.65	2572.99	21,S(PhosphoST);	IPI:IPI00867934.1
		TiATPMNP1.10236.10236.2.dta	62.71	2572.99	21,S(PhosphoST);	IPI:IPI00867934.1
		TiATPMNP1.10247.10247.2.dta	52.5	1407.54	5,S(PhosphoST);	IPI:IPI00188989.1
		TiATPMNP3.10634.10634.2.dta	51.11	1407.54	5,S(PhosphoST);	IPI:IPI00188989.1
168	GGEATWVGSEFEISFPDSPGSQAQVDHLP R	TiATPMNP3.14717.14717.3.dta	53.44	3266.41	7,S(PhosphoST);	IPI:IPI00207306.3
169	GILAADESVGTMGNR	TiATPMNP1.9371.9371.2.dta	66.71	1568.68	8,S(PhosphoST);	IPI:IPI00471911.7
170	GIPLTGDTSPPELLPGDPLPPPK	TiATPMNP2.14457.14457.2.dta	69.07	2612.29	10,S(PhosphoST);	IPI:IPI00365487.2
		TiATPMNP3.14323.14323.2.dta	66.77	2612.29	10,S(PhosphoST);	IPI:IPI00365487.2
		TiATPMNP1.13994.13994.3.dta	52.06	2612.29	10,S(PhosphoST);	IPI:IPI00365487.2
171	GISPIVFDR	TiATPMNP1.11162.11162.2.dta	66.75	1081.51	3,S(PhosphoST);	IPI:IPI00196301.4
		TiATPMNP3.11610.11610.2.dta	65.48	1081.51	3,S(PhosphoST);	IPI:IPI00196301.4
		TiATPMNP2.11828.11828.2.dta	59.59	1081.51	3,S(PhosphoST);	IPI:IPI00196301.4
172	GKGAVGAYGSERTTQSLQDFPVADSEEE AEEEFQK	TiATPMNP2.12041.12041.3.dta	71.42	4107.59	8,Y(PhosphoY); 13,T(PhosphoST); 14,T(PhosphoST); 25,S(PhosphoST);	IPI:IPI00190035.1
		TiATPMNP1.11509.11509.3.dta	69.12	4107.59	8,Y(PhosphoY);	IPI:IPI00190035.1

173	GLLTHQGPGYLSDSPSPGGTASQK						14,T(PhosphoST); 16,S(PhosphoST); 25,S(PhosphoST);	
		TiATPMNP1.9683.9683.3.dta	71.32	2530.16	17,S(PhosphoST);	IPI:IPI00324094.3		
		TiATPMNP2.10245.10245.3.dta	64.01	2530.16	21,T(PhosphoST);	IPI:IPI00324094.3		
		TiATPMNP2.10253.10253.3.dta	62.82	2530.16	17,S(PhosphoST);	IPI:IPI00324094.3		
		TiATPMNP3.10041.10041.3.dta	61.59	2530.16	17,S(PhosphoST);	IPI:IPI00324094.3		
174	TNEGSAGSAGMGSGAGAGVGAGGGG GSGASSGGGAGGLQPSSR							
		TiATPMNP2.13183.13183.3.dta	60.25	3755.35	11,M(OxidationM); 31,S(PhosphoST); 32,S(PhosphoST); 42,S(PhosphoST); 43,S(PhosphoST);	IPI:IPI00199577.5		
175	TISSQTGMSGPKSK							
		TiATPMNP3.27169.27169.3.dta	50.5	1742.56	3,S(PhosphoST); 6,T(PhosphoST); 8,M(OxidationM); 9,S(PhosphoST); 13,S(PhosphoST);	IPI:IPI00366078.3		
176	GPAGEASASPPVR							
		TiATPMNP2.7923.7923.2.dta	67.51	1273.56	9,S(PhosphoST);	IPI:IPI00360536.4		
177	GPAGSPCEEGDDAEEDGTSDLR							
		TiATPMNP2.8700.8700.2.dta	54.31	2341.84	5,S(PhosphoST);	IPI:IPI00400666.3		
178	GPAGSPCEEGDDAEEDGTSDLRDEASSV							

179	TR	GPPSPAPVMHSPSR	TiATPMNP1.9959.9959.3.dta	106.25	3187.23	5,S(PhosphoST);	IPI:IPI00400666.3
			TiATPMNP3.10283.10283.3.dta	106.16	3187.23	5,S(PhosphoST);	IPI:IPI00400666.3
			TiATPMNP2.10462.10462.3.dta	95.46	3187.23	5,S(PhosphoST);	IPI:IPI00400666.3
			TiATPMNP3.8318.8318.2.dta	61.4	1671.68	4,S(PhosphoST); 12,S(PhosphoST);	IPI:IPI00476223.3
180	TR	GQNGEDLSTGGASPSAEGEPMSLSVQP GHDSEATK					
			TiATPMNP3.9957.9957.3.dta	55.17	3634.51	15,S(PhosphoST);	IPI:IPI00198929.1
181	TR	GQTPLTEGSEDLGDHSDPEESFAR	TiATPMNP1.10150.10150.3.dta	54.52	2732.04	9,S(PhosphoST); 16,S(PhosphoST);	IPI:IPI00372929.2
			TiATPMNP2.10878.10878.3.dta	48.34	2652.07	6,T(PhosphoST);	IPI:IPI00372929.2
182	TR	GRLSPVPVPR	TiATPMNP2.8913.8913.2.dta	59.78	1155.60	4,S(PhosphoST);	IPI:IPI00373147.2
			TiATPMNP3.8577.8577.2.dta	46.48	1155.60	4,S(PhosphoST);	IPI:IPI00373147.2
183	TR	GSAPHSESDIPEQEEILGSDDDDEQEDPN DYCK	TiATPMNP1.10387.10387.3.dta	65.06	3812.46	20,S(PhosphoST);	IPI:IPI00372823.3
			TiATPMNP1.9093.9093.3.dta	66.07	2096.82	13,S(PhosphoST);	IPI:IPI00192984.4
184	TR	GSEDYDPPLPHSYSSDR	TiATPMNP3.9511.9511.2.dta	53.03	2096.82	15,S(PhosphoST);	IPI:IPI00192984.4
			TiATPMNP2.13144.13144.2.dta	66.66	2027.88	2,S(PhosphoST);	IPI:IPI00373564.3
185	TR	GSGDTSSLIDPDTLSSELR					
186	TR	GSLASLDSLR					

187	GSPGALSSDSELPENPYSQVK	TiATPMNP2.11326.11326.2.dta	71.96	1096.50	5,S(PhosphoST);	IPI:IPI00359491.4
		TiATPMNP3.11083.11083.2.dta	71.62	1096.50	5,S(PhosphoST);	IPI:IPI00359491.4
		TiATPMNP1.10651.10651.2.dta	65.63	1096.50	5,S(PhosphoST);	IPI:IPI00359491.4
		TiATPMNP1.10324.10324.2.dta	83.98	2239.98	8,S(PhosphoST);	IPI:IPI00368670.3
		TiATPMNP2.10869.10869.2.dta	64.86	2239.98	8,S(PhosphoST);	IPI:IPI00368670.3
		TiATPMNP3.10678.10678.2.dta	51.83	2239.98	8,S(PhosphoST);	IPI:IPI00368670.3
188	GSPVSEIGWETPPESPR	TiATPMNP3.11304.11304.2.dta	74.39	1999.88	16,S(PhosphoST);	IPI:IPI00360767.3
189	GSTGIGGAGPQGSANSHPASGGGESAG VPLSPSWASGR	TiATPMNP3.17047.17047.3.dta	52.18	3824.48	2,S(PhosphoST); 3,T(PhosphoST); 14,S(PhosphoST); 39,S(PhosphoST);	IPI:IPI00515811.3
190	GTGDCSDEEVDGK	TiATPMNP3.6201.6201.2.dta	65.79	1446.47	6,S(PhosphoST);	IPI:IPI00209113.3
		TiATPMNP2.7146.7146.2.dta	64.32	1446.47	6,S(PhosphoST);	IPI:IPI00209113.3
191	TFQQIQEEEDDDYPGSYSPQDPSAGPLLT EELIK	TiATPMNP2.15421.15421.3.dta	72.14	3917.72	17,Y(PhosphoY);	IPI:IPI00364827.3
		TiATPMNP2.15414.15414.3.dta	63.41	3917.72	18,S(PhosphoST);	IPI:IPI00364827.3
192	TGSSSPPGGLSKPGSQLDSMLGSLQSDLN K	TiATPMNP1.15998.15998.3.dta	61.11	3023.40	1,T(PhosphoST);	IPI:IPI00363651.5
		TiATPMNP3.16209.16209.3.dta	58.28	3023.40	5,S(PhosphoST);	IPI:IPI00363651.5

202	HIKEEPLSEEEPC ^T STAVPSPEK	TiATPMNP2.11147.11147.3.dta	72.28	2293.99	11,S(PhosphoST); 13,S(PhosphoST);	IPI:IPI00327469.1
		TiATPMNP1.10023.10023.3.dta	68.26	2293.99	8,S(PhosphoST); 13,S(PhosphoST);	IPI:IPI00327469.1
		TiATPMNP1.12753.12753.3.dta	62.54	2214.02	11,S(PhosphoST);	IPI:IPI00327469.1
		TiATPMNP2.10575.10575.3.dta	62.4	2293.99	8,S(PhosphoST); 13,S(PhosphoST);	IPI:IPI00327469.1
		TiATPMNP1.12129.12129.3.dta	62.31	2293.99	8,S(PhosphoST); 11,S(PhosphoST);	IPI:IPI00327469.1
		TiATPMNP2.12653.12653.3.dta	58.03	2293.99	8,S(PhosphoST); 11,S(PhosphoST);	IPI:IPI00327469.1
		TiATPMNP1.10761.10761.3.dta	56.69	2293.99	11,S(PhosphoST); 13,S(PhosphoST);	IPI:IPI00327469.1
		TiATPMNP3.11974.11974.3.dta	54.02	2214.02	8,S(PhosphoST);	IPI:IPI00327469.1
		TiATPMNP3.12555.12555.3.dta	52.48	2293.99	8,S(PhosphoST); 11,S(PhosphoST);	IPI:IPI00327469.1
		TiATPMNP2.11497.11497.3.dta	48.28	2373.96	8,S(PhosphoST); 11,S(PhosphoST); 13,S(PhosphoST);	IPI:IPI00327469.1
203	HSGPEGEATVNN ^D SEAEDDD ^D DGLIPTME EIPEDAASLAMR	TiATPMNP2.9229.9229.3.dta	82.1	2672.18	8,S(PhosphoST);	IPI:IPI00214536.1
		TiATPMNP3.9007.9007.3.dta	81.15	2672.18	8,S(PhosphoST);	IPI:IPI00214536.1
		TiATPMNP1.17504.17504.3.dta	66.28	4305.76	14,S(PhosphoST);	IPI:IPI00205806.1
		TiATPMNP1.13752.13752.3.dta	66.21	4321.76	14,S(PhosphoST);	IPI:IPI00205806.1

204	HSSLPTESDEDIAPAQR	TiATPMNP1.12839.12839.3.dta	52.51	4337.75	27,M(OxidationM); 14,S(PhosphoST);	IPI:IPI00205806.1
					27,M(OxidationM);	
		TiATPMNP2.14289.14289.3.dta	48.83	4321.76	39,M(OxidationM); 9,T(PhosphoST);	IPI:IPI00205806.1
205	HSSWGSVGLGSLEASR	TiATPMNP3.8735.8735.2.dta	94.56	1930.82	27,M(OxidationM);	
					8,S(PhosphoST);	IPI:IPI00198486.4
		TiATPMNP1.8066.8066.2.dta	71.85	1930.82	8,S(PhosphoST);	IPI:IPI00198486.4
206	IDISPSALR	TiATPMNP2.8905.8905.2.dta	68.35	1930.82	8,S(PhosphoST);	IPI:IPI00198486.4
		TiATPMNP3.11214.11214.2.dta	57.46	1764.77	3,S(PhosphoST);	IPI:IPI00363941.1
207	IDISPSTFR	TiATPMNP1.10091.10091.2.dta	65.07	1049.50	4,S(PhosphoST);	IPI:IPI00566166.1
					4,S(PhosphoST);	IPI:IPI00566166.1
		TiATPMNP3.10550.10550.2.dta	55.85	1049.50	4,S(PhosphoST);	IPI:IPI00566166.1
208	IGELGAPEVWGLSPK	TiATPMNP2.11164.11164.2.dta	62.97	1113.50	4,S(PhosphoST);	IPI:IPI00359323.1
					4,S(PhosphoST);	IPI:IPI00359323.1
		TiATPMNP1.10504.10504.2.dta	57.43	1113.50	4,S(PhosphoST);	IPI:IPI00359323.1
209	IEDVGSDEEDDSGK	TiATPMNP1.13373.13373.2.dta	76.82	1630.79	13,S(PhosphoST);	IPI:IPI00192070.2
					13,S(PhosphoST);	IPI:IPI00192070.2
		TiATPMNP2.13952.13952.2.dta	72.53	1630.79	13,S(PhosphoST);	IPI:IPI00192070.2
		TiATPMNP3.6485.6485.2.dta	92.42	1572.56	6,S(PhosphoST);	IPI:IPI00471584.7
					6,S(PhosphoST);	IPI:IPI00471584.7
		TiATPMNP1.6281.6281.2.dta	87.08	1572.56	6,S(PhosphoST);	IPI:IPI00471584.7

210	IEDVGSDEEDDSGKDK	TiATPMNP1.6112.6112.2.dta	97.55	1815.68	6,S(PhosphoST);	IPI:IPI00471584.7
		TiATPMNP3.6432.6432.2.dta	94.16	1815.68	6,S(PhosphoST);	IPI:IPI00471584.7
		TiATPMNP2.7640.7640.2.dta	76.47	1815.68	6,S(PhosphoST);	IPI:IPI00471584.7
211	IEDVGSDEEDDSGKDKK	TiATPMNP2.7500.7500.3.dta	52.58	1943.78	6,S(PhosphoST);	IPI:IPI00471584.7
		TiATPMNP3.6388.6388.3.dta	52.4	1943.78	6,S(PhosphoST);	IPI:IPI00471584.7
212	SVVTEEFNGSDWER	TiATPMNP2.11763.11763.2.dta	54.68	1732.69	10,S(PhosphoST);	IPI:IPI00197723.4
213	TALPTSGSSTGELELLAGEVPAR	TiATPMNP3.13829.13829.2.dta	95.01	2334.12	9,S(PhosphoST);	IPI:IPI00208515.2
		TiATPMNP1.13493.13493.2.dta	68.48	2334.12	9,S(PhosphoST);	IPI:IPI00208515.2
		TiATPMNP2.13992.13992.2.dta	57.69	2334.12	9,S(PhosphoST);	IPI:IPI00208515.2
		TiATPMNP1.13471.13471.2.dta	55.05	2334.12	10,T(PhosphoST);	IPI:IPI00208515.2
		TiATPMNP3.13805.13805.2.dta	46.94	2334.12	10,T(PhosphoST);	IPI:IPI00208515.2
		TiATPMNP2.14371.14371.2.dta	43.72	2334.12	8,S(PhosphoST);	IPI:IPI00208515.2
214	TDISMGDFR	TiATPMNP1.10306.10306.2.dta	57.27	1119.42	4,S(PhosphoST);	IPI:IPI00205255.1
215	TDVPLSSAEEAECHWADTELNR	TiATPMNP2.13174.13174.3.dta	75	2608.07	7,S(PhosphoST);	IPI:IPI00204212.1
216	TFCGTPDYIAPEIIAYQPYGK	TiATPMNP3.14795.14795.2.dta	53.07	2482.10	1,T(PhosphoST);	IPI:IPI00189278.5
217	IHTTSLTGQSPPLASGHQGEVDAPSEPGA TNIQQSPSPDPSTK	TiATPMNP3.9772.9772.3.dta	66.47	4480.00	3,T(PhosphoST); 42,T(PhosphoST);	IPI:IPI00368692.5

218	SVPTIDSGNEDDDSSFK	TiATPMNP1.9489.9489.3.dta	51.94	4480.00	3,T(PhosphoST); 42,T(PhosphoST);	IPI:IPI00368692.5
219	SVSEINSDDDELPGR	TiATPMNP2.9304.9304.2.dta	113.32	1890.73	7,S(PhosphoST);	IPI:IPI00366370.3
220	IIPTLEEGQLPSPTATSQLPLESDAVECLN YQHYK	TiATPMNP3.9131.9131.2.dta	113.23	1890.73	7,S(PhosphoST);	IPI:IPI00366370.3
221	IQQFDDGGSDDEEDIWEEK	TiATPMNP1.8447.8447.2.dta	107.86	1890.73	7,S(PhosphoST);	IPI:IPI00366370.3
222	ISENYSDKSDVENADESSSILKPLISPAA ER	TiATPMNP3.8882.8882.2.dta	54.22	1595.66	7,S(PhosphoST);	IPI:IPI00565007.2
223	SVSNLKPVPVIGSK	TiATPMNP3.16620.16620.3.dta	52.8	4132.98	13,S(PhosphoST);	IPI:IPI00194974.2
		TiATPMNP1.11344.11344.2.dta	68.48	2217.85	9,S(PhosphoST);	IPI:IPI00766645.3
		TiATPMNP2.11930.11930.2.dta	52.01	2217.85	9,S(PhosphoST);	IPI:IPI00766645.3
		TiATPMNP1.12944.12944.3.dta	92.3	3609.59	6,S(PhosphoST);	IPI:IPI00199985.1
		TiATPMNP2.13462.13462.3.dta	82.82	3609.59	9,S(PhosphoST); 6,S(PhosphoST);	IPI:IPI00199985.1
		TiATPMNP2.13148.13148.3.dta	58.58	3529.62	9,S(PhosphoST); 6,S(PhosphoST);	IPI:IPI00199985.1
		TiATPMNP2.10069.10069.2.dta	67.5	1502.80	3,S(PhosphoST);	IPI:IPI00372804.2
		TiATPMNP1.9399.9399.2.dta	66.49	1502.80	3,S(PhosphoST);	IPI:IPI00372804.2
		TiATPMNP3.9662.9662.2.dta	63.83	1502.80	3,S(PhosphoST);	IPI:IPI00372804.2
		TiATPMNP1.9411.9411.2.dta	58.88	1502.80	1,S(PhosphoST);	IPI:IPI00372804.2

224	IVEPEVVGESDSEVEGDAWR	TiATPMNP2.9869.9869.2.dta	58.73	1502.80	1,S(PhosphoST);	IPI:IPI00372804.2
		TiATPMNP3.10244.10244.2.dta	55.49	1502.80	1,S(PhosphoST);	IPI:IPI00372804.2
		TiATPMNP1.11208.11208.2.dta	95.47	2279.97	10,S(PhosphoST);	IPI:IPI00209527.3
		TiATPMNP2.11754.11754.2.dta	86.88	2279.97	10,S(PhosphoST);	IPI:IPI00209527.3
		TiATPMNP1.11201.11201.2.dta	84.67	2279.97	12,S(PhosphoST);	IPI:IPI00209527.3
		TiATPMNP1.11311.11311.2.dta	48.96	2359.94	10,S(PhosphoST); 12,S(PhosphoST);	IPI:IPI00209527.3
225	IVSAQSLAEDDVE	TiATPMNP2.10281.10281.2.dta	44.35	1453.61	3,S(PhosphoST);	IPI:IPI00208207.6
226	IYHLPDAESDEDEDFKEQTR	TiATPMNP1.9790.9790.3.dta	62.52	2515.03	9,S(PhosphoST);	IPI:IPI00208304.1
		TiATPMNP2.10399.10399.3.dta	48.28	2515.03	9,S(PhosphoST);	IPI:IPI00208304.1
227	IYQFPDCDSDEDEDFK	TiATPMNP1.10776.10776.2.dta	59.68	2100.74	9,S(PhosphoST);	IPI:IPI00421642.1
		TiATPMNP2.11413.11413.2.dta	51.07	2100.74	9,S(PhosphoST);	IPI:IPI00421642.1
228	KAEDSDSEPEPEDNVR	TiATPMNP2.7796.7796.2.dta	81.4	1974.70	5,S(PhosphoST); 7,S(PhosphoST);	IPI:IPI00357938.4
229	KAESSSDSDSDSEDEAPAKPVSATK	TiATPMNP2.7584.7584.3.dta	68.22	2790.15	6,S(PhosphoST);	IPI:IPI00195961.1
		TiATPMNP2.7591.7591.3.dta	61.52	2790.15	5,S(PhosphoST);	IPI:IPI00195961.1
230	KASGPPVSELITK	TiATPMNP1.9176.9176.2.dta	86.98	1404.71	3,S(PhosphoST);	IPI:IPI00231650.7
		TiATPMNP3.9751.9751.2.dta	82.68	1404.71	3,S(PhosphoST);	IPI:IPI00231650.7
		TiATPMNP2.9978.9978.2.dta	56.59	1404.71	3,S(PhosphoST);	IPI:IPI00231650.7

234 KEESESDDDMGFLFD

TiATPMNP1.12516.12516.2.dta	79.62	2043.71	7,S(PhosphoST); 11,M(OxidationM);	IPI:IPI00188804.1
TiATPMNP2.18508.18508.2.dta	77.64	2107.68	4,S(PhosphoST); 7,S(PhosphoST);	IPI:IPI00188804.1
TiATPMNP3.23023.23023.2.dta	76.5	2027.71	4,S(PhosphoST);	IPI:IPI00188804.1
TiATPMNP3.18276.18276.2.dta	71.51	2043.71	4,S(PhosphoST); 11,M(OxidationM);	IPI:IPI00188804.1
TiATPMNP1.12763.12763.2.dta	69.94	2123.67	4,S(PhosphoST); 7,S(PhosphoST); 11,M(OxidationM);	IPI:IPI00188804.1
TiATPMNP2.18919.18919.2.dta	66.35	2027.71	4,S(PhosphoST);	IPI:IPI00188804.1
TiATPMNP2.13243.13243.2.dta	64.31	2123.67	4,S(PhosphoST); 7,S(PhosphoST); 11,M(OxidationM);	IPI:IPI00188804.1
TiATPMNP1.12720.12720.2.dta	63.75	2043.71	4,S(PhosphoST); 11,M(OxidationM);	IPI:IPI00188804.1
TiATPMNP3.19661.19661.2.dta	63.43	2107.68	4,S(PhosphoST); 7,S(PhosphoST);	IPI:IPI00188804.1
TiATPMNP2.13370.13370.2.dta	62.77	2043.71	4,S(PhosphoST); 11,M(OxidationM);	IPI:IPI00188804.1
TiATPMNP2.14815.14815.2.dta	102.06	2041.73	7,S(PhosphoST);	IPI:IPI00734740.2
TiATPMNP3.19991.19991.2.dta	95.28	2041.73	7,S(PhosphoST);	IPI:IPI00734740.2
TiATPMNP1.14248.14248.2.dta	94.88	2041.73	7,S(PhosphoST);	IPI:IPI00734740.2
TiATPMNP1.15561.15561.2.dta	89.18	2041.73	4,S(PhosphoST);	IPI:IPI00734740.2
TiATPMNP3.17913.17913.2.dta	84.39	2041.73	4,S(PhosphoST);	IPI:IPI00734740.2

TiATPMNP2.13232.13232.2.dta	82.46	2057.72	7,S(PhosphoST); 11,M(OxidationM);	IPI:IPI00734740.2
TiATPMNP1.12517.12517.2.dta	81.57	2057.72	7,S(PhosphoST); 11,M(OxidationM);	IPI:IPI00734740.2
TiATPMNP2.19270.19270.2.dta	79.24	2041.73	4,S(PhosphoST);	IPI:IPI00734740.2
TiATPMNP1.25395.25395.2.dta	74.8	2057.72	4,S(PhosphoST); 11,M(OxidationM);	IPI:IPI00734740.2
TiATPMNP3.13225.13225.2.dta	74.64	2057.72	7,S(PhosphoST); 11,M(OxidationM);	IPI:IPI00734740.2
TiATPMNP3.13261.13261.2.dta	70.83	2057.72	4,S(PhosphoST); 11,M(OxidationM);	IPI:IPI00734740.2
TiATPMNP1.23415.23415.2.dta	68.83	2121.69	4,S(PhosphoST); 7,S(PhosphoST);	IPI:IPI00734740.2
TiATPMNP2.19771.19771.2.dta	67.15	2121.69	4,S(PhosphoST); 7,S(PhosphoST);	IPI:IPI00734740.2
TiATPMNP3.21107.21107.2.dta	65.78	2121.69	4,S(PhosphoST); 7,S(PhosphoST);	IPI:IPI00734740.2
TiATPMNP2.13327.13327.2.dta	64.19	2057.72	4,S(PhosphoST); 11,M(OxidationM);	IPI:IPI00734740.2
TiATPMNP2.27964.27964.2.dta	47.59	2137.69	4,S(PhosphoST); 7,S(PhosphoST); 11,M(OxidationM);	IPI:IPI00734740.2
TiATPMNP1.15366.15366.2.dta	101.88	2041.73	4,S(PhosphoST);	IPI:IPI00200145.1
TiATPMNP2.14809.14809.2.dta	89.27	2041.73	7,S(PhosphoST);	IPI:IPI00200145.1
TiATPMNP2.15037.15037.2.dta	88.07	2041.73	4,S(PhosphoST);	IPI:IPI00200145.1

237	KETESEAEDDNLDDLER	TiATPMNP3.17510.17510.2.dta	87.52	2041.73	7,S(PhosphoST);	IPI:IPI00200145.1
		TiATPMNP1.14238.14238.2.dta	85.78	2041.73	7,S(PhosphoST);	IPI:IPI00200145.1
		TiATPMNP3.22849.22849.2.dta	80.33	2041.73	4,S(PhosphoST);	IPI:IPI00200145.1
		TiATPMNP1.14854.14854.2.dta	79.34	2121.69	4,S(PhosphoST);	IPI:IPI00200145.1
					7,S(PhosphoST);	
		TiATPMNP2.27843.27843.2.dta	76.71	2121.69	4,S(PhosphoST);	IPI:IPI00200145.1
					7,S(PhosphoST);	
		TiATPMNP2.13688.13688.2.dta	66.51	2137.69	4,S(PhosphoST);	IPI:IPI00200145.1
					7,S(PhosphoST);	
					11,M(OxidationM);	
238	KGATPAEDDEDNDIDLFGSDEEEEDKEA AR	TiATPMNP1.12855.12855.2.dta	64.76	2137.69	4,S(PhosphoST);	IPI:IPI00200145.1
					7,S(PhosphoST);	
					11,M(OxidationM);	
		TiATPMNP3.27833.27833.2.dta	64.33	2121.69	4,S(PhosphoST);	IPI:IPI00200145.1
					7,S(PhosphoST);	
		TiATPMNP3.9222.9222.2.dta	120.97	2085.81	5,S(PhosphoST);	IPI:IPI00776986.2
		TiATPMNP1.8588.8588.2.dta	114.94	2085.81	5,S(PhosphoST);	IPI:IPI00776986.2
		TiATPMNP2.9398.9398.2.dta	103.86	2085.81	3,T(PhosphoST);	IPI:IPI00776986.2
		TiATPMNP2.9410.9410.2.dta	98.54	2085.81	5,S(PhosphoST);	IPI:IPI00776986.2
		TiATPMNP2.9574.9574.2.dta	86.52	2165.78	3,T(PhosphoST);	IPI:IPI00776986.2
					5,S(PhosphoST);	
238	KGATPAEDDEDNDIDLFGSDEEEEDKEA AR	TiATPMNP2.11016.11016.3.dta	118.46	3388.35	19,S(PhosphoST);	IPI:IPI00197900.5
		TiATPMNP1.10418.10418.3.dta	84.27	3388.35	19,S(PhosphoST);	IPI:IPI00197900.5

TiATPMNP3.16031.16031.3.dta	91.64	2318.06	3,S(PhosphoST);	IP1:IP100194277.3
TiATPMNP1.15736.15736.3.dta	83.83	2318.06	3,S(PhosphoST);	IP1:IP100194277.3
TiATPMNP2.16620.16620.3.dta	77.01	2318.06	3,S(PhosphoST);	IP1:IP100194277.3
TiATPMNP2.10852.10852.2.dta	91.63	2127.98	17,S(PhosphoST);	IP1:IP100360767.3
TiATPMNP1.10290.10290.2.dta	72.98	2127.98	17,S(PhosphoST);	IP1:IP100360767.3
TiATPMNP1.10285.10285.3.dta	60.51	2127.98	17,S(PhosphoST);	IP1:IP100360767.3
TiATPMNP1.10312.10312.2.dta	50.11	2127.98	6,S(PhosphoST);	IP1:IP100360767.3
TiATPMNP3.6068.6068.2.dta	77.29	1574.57	7,S(PhosphoST);	IP1:IP100209113.3
TiATPMNP2.6784.6784.2.dta	62.77	1574.57	7,S(PhosphoST);	IP1:IP100209113.3
TiATPMNP3.6383.6383.3.dta	67.08	2202.85	7,S(PhosphoST);	IP1:IP100209113.3
TiATPMNP3.8692.8692.2.dta	73.39	1225.55	3,S(PhosphoST);	IP1:IP100368692.5
TiATPMNP3.9346.9346.2.dta	52	1533.73	3,S(PhosphoST);	IP1:IP100368857.4
TiATPMNP1.18832.18832.2.dta	90.1	2181.00	4,S(PhosphoST);	IP1:IP100230778.1
TiATPMNP1.18801.18801.2.dta	75.57	2181.00	3,S(PhosphoST);	IP1:IP100230778.1
TiATPMNP2.9106.9106.2.dta	124.16	2274.94	13,T(PhosphoST);	IP1:IP100369961.4
TiATPMNP1.8199.8199.2.dta	114.66	2274.94	13,T(PhosphoST);	IP1:IP100369961.4
TiATPMNP1.8170.8170.3.dta	72.85	2274.94	13,T(PhosphoST);	IP1:IP100369961.4
TiATPMNP3.8914.8914.3.dta	57.06	2274.94	13,T(PhosphoST);	IP1:IP100369961.4

247	KLEKEEEEGISQESSEEEQ	TiATPMNP2.9092.9092.3.dta	53.48	2274.94	13,T(PhosphoST);	IPI:IPI00369961.4
248	KLPEPLNWRSDDEDEDSDFGEEQR	TiATPMNP2.8016.8016.3.dta	64	2314.95	14,S(PhosphoST);	IPI:IPI00203725.2
		TiATPMNP2.12296.12296.3.dta	70.9	2998.24	10,S(PhosphoST);	IPI:IPI00205564.1
		TiATPMNP1.12061.12061.3.dta	57.02	3078.20	10,S(PhosphoST);	IPI:IPI00205564.1
				17,S(PhosphoST);		
		TiATPMNP1.11753.11753.3.dta	52.03	2998.24	10,S(PhosphoST);	IPI:IPI00205564.1
249	KLSGDQITLPTTVDYSSVPK	TiATPMNP2.12277.12277.2.dta	119.35	2227.09	3,S(PhosphoST);	IPI:IPI00366400.1
		TiATPMNP1.11729.11729.2.dta	111.59	2227.09	3,S(PhosphoST);	IPI:IPI00366400.1
		TiATPMNP3.24712.24712.2.dta	103.31	2227.09	3,S(PhosphoST);	IPI:IPI00366400.1
250	KNSVSLHAPK	TiATPMNP3.7408.7408.3.dta	59.8	1158.57	3,S(PhosphoST);	IPI:IPI00215390.1
251	SSSVGSSSSYPISAVPR	TiATPMNP1.9299.9299.2.dta	123.4	1832.81	3,S(PhosphoST);	IPI:IPI00209000.2
		TiATPMNP3.9719.9719.2.dta	120.5	1832.81	3,S(PhosphoST);	IPI:IPI00209000.2
		TiATPMNP2.9909.9909.2.dta	88.44	1832.81	3,S(PhosphoST);	IPI:IPI00209000.2
		TiATPMNP2.10155.10155.2.dta	68.09	1912.77	3,S(PhosphoST);	IPI:IPI00209000.2
				6,S(PhosphoST);		
252	KPPAPSPVQSQSPSTNWSAAPAK	TiATPMNP2.9237.9237.3.dta	54.41	2685.21	7,S(PhosphoST);	IPI:IPI00359359.6
		TiATPMNP1.8870.8870.3.dta	54.21	2685.21	19,S(PhosphoST);	
				7,S(PhosphoST);		IPI:IPI00359359.6
				15,S(PhosphoST);		
253	KQSQSDVVLVEEAK					

254	KQTPPASPSQPAEDRPPSPPIYEDAAPLK	TiATPMNP1.9579.9579.2.dta	96.26	1779.85	3,S(PhosphoST);	IPI:IPI00205806.1
		TiATPMNP3.10092.10092.2.dta	90.61	1779.85	3,S(PhosphoST);	IPI:IPI00205806.1
		TiATPMNP2.10300.10300.2.dta	71.86	1779.85	3,S(PhosphoST);	IPI:IPI00205806.1
		TiATPMNP1.9958.9958.3.dta	51.14	3329.51	3,T(PhosphoST); 9,S(PhosphoST);	IPI:IPI00198520.2
255	KQVSAGDLFR					
256	KRDSDSDADEATPTTTTPR	TiATPMNP3.10198.10198.2.dta	50.32	1198.56	4,S(PhosphoST);	IPI:IPI00768902.1
		TiATPMNP2.7554.7554.3.dta	50	2120.82	4,S(PhosphoST); 6,S(PhosphoST);	IPI:IPI00191460.5
257	KVEEEQEADEEDVSEETENR	TiATPMNP3.7908.7908.2.dta	114.33	2601.00	14,S(PhosphoST);	IPI:IPI00365626.3
		TiATPMNP2.8113.8113.2.dta	108.02	2601.00	14,S(PhosphoST);	IPI:IPI00365626.3
		TiATPMNP1.6333.6333.2.dta	101.69	2601.00	14,S(PhosphoST);	IPI:IPI00365626.3
		TiATPMNP1.6346.6346.3.dta	74.7	2601.00	14,S(PhosphoST);	IPI:IPI00365626.3
		TiATPMNP3.7892.7892.3.dta	70.83	2601.00	14,S(PhosphoST);	IPI:IPI00365626.3
		TiATPMNP2.8125.8125.3.dta	64.76	2601.00	14,S(PhosphoST);	IPI:IPI00365626.3
258	SVAGQTVLITGAGHGIGR	TiATPMNP2.10612.10612.2.dta	77.91	1771.89	1,S(PhosphoST);	IPI:IPI00363696.1
		TiATPMNP1.9992.9992.2.dta	75.5	1771.89	1,S(PhosphoST);	IPI:IPI00363696.1
259	KVSDGSEDEDEEEESSEDEEPPPP KR	TiATPMNP3.7804.7804.3.dta	122.77	3630.34	6,S(PhosphoST);	IPI:IPI00400578.1
		TiATPMNP3.6492.6492.3.dta	67.17	3710.31	6,S(PhosphoST); 19,S(PhosphoST);	IPI:IPI00400578.1

260	LADDEGDSSESVGQSR	TiATPMNP2.7739.7739.2.dta	118.93	1844.68	8,S(PhosphoST);	IPI:IPI00370333.1
261	LAEGEEKPEPDGSSEESISTVEEPENETP PAPSR	TiATPMNP3.9281.9281.3.dta	86.37	3830.63	15,S(PhosphoST);	IPI:IPI00400578.1
		TiATPMNP1.8902.8902.3.dta	80.87	3830.63	15,S(PhosphoST);	IPI:IPI00400578.1
		TiATPMNP2.9386.9386.3.dta	71.99	3830.63	20,S(PhosphoST);	IPI:IPI00400578.1
		TiATPMNP1.8895.8895.3.dta	70.42	3830.63	14,S(PhosphoST);	IPI:IPI00400578.1
		TiATPMNP1.8705.8705.3.dta	68.28	3830.63	21,T(PhosphoST);	IPI:IPI00400578.1
		TiATPMNP2.9392.9392.3.dta	62.98	3830.63	21,T(PhosphoST);	IPI:IPI00400578.1
		TiATPMNP3.9244.9244.3.dta	62.54	3830.63	20,S(PhosphoST);	IPI:IPI00400578.1
		TiATPMNP1.8752.8752.3.dta	60.71	3910.60	15,S(PhosphoST);	IPI:IPI00400578.1
					18,S(PhosphoST);	
262	LAGDSDFSLKPEKGDKSSEPTDVETK	TiATPMNP3.9229.9229.3.dta	57.71	3830.63	21,T(PhosphoST);	IPI:IPI00400578.1
		TiATPMNP2.9405.9405.3.dta	56.49	3830.63	18,S(PhosphoST);	IPI:IPI00400578.1
		TiATPMNP1.8678.8678.3.dta	52.57	3830.63	20,S(PhosphoST);	IPI:IPI00400578.1
263	LAGLGPEDDPDTTDEQEPR	TiATPMNP1.8772.8772.3.dta	52.41	2987.34	17,S(PhosphoST);	IPI:IPI00199060.2
		TiATPMNP2.9362.9362.3.dta	50.5	2987.34	17,S(PhosphoST);	IPI:IPI00199060.2
		TiATPMNP1.8518.8518.2.dta	101.23	2146.85	12,T(PhosphoST);	IPI:IPI00369961.4
		TiATPMNP3.9353.9353.2.dta	81.32	2146.85	12,T(PhosphoST);	IPI:IPI00369961.4
		TiATPMNP2.9326.9326.2.dta	75.87	2146.85	12,T(PhosphoST);	IPI:IPI00369961.4
264	LASDDRPSPR					
265	SVDEVNYWDK	TiATPMNP2.7816.7816.2.dta	61.08	1288.57	8,S(PhosphoST);	IPI:IPI00189558.1

266	LCDFGSASHVADNDITPYLVSR	TiATPMNP2.10293.10293.2.dta TiATPMNP1.9510.9510.2.dta	62.89 58.53	1332.52 1332.52	1,S(PhosphoST); 1,S(PhosphoST);	IPI:IPI00365663.1 IPI:IPI00365663.1
		TiATPMNP2.12361.12361.3.dta TiATPMNP3.12184.12184.3.dta TiATPMNP1.11795.11795.2.dta TiATPMNP1.11807.11807.2.dta	67.7 64.05 60.27 53.08	2515.10 2515.10 2515.10 2515.10	18,Y(PhosphoY); 18,Y(PhosphoY); 16,T(PhosphoST); 18,Y(PhosphoY);	IPI:IPI00362970.2 IPI:IPI00362970.2 IPI:IPI00362970.2 IPI:IPI00362970.2
267	LCINCVTTEMMSANPCFVKPFVFIISHX NGLCK	TiATPMNP2.12352.12352.3.dta	49.09	4141.86	11,M(OxidationM); 27,S(PhosphoST); 29,X(OxidationM);	IPI:IPI00949627.1
268	SVEDEMDSPGEEPFYTGQGR	TiATPMNP2.10832.10832.2.dta	74.63	2307.88	8,S(PhosphoST);	IPI:IPI00210163.1
269	LECELESEDADKGGNESDELANGEMGG DR	TiATPMNP1.9292.9292.3.dta TiATPMNP2.9522.9522.3.dta	80 68.19	3204.23 3204.23	17,S(PhosphoST); 17,S(PhosphoST);	IPI:IPI00763061.2 IPI:IPI00763061.2
270	LDGETASDSESR	TiATPMNP3.6118.6118.2.dta TiATPMNP2.6963.6963.2.dta	49.5 45.34	1344.50 1344.50	7,S(PhosphoST); 7,S(PhosphoST);	IPI:IPI00208200.2 IPI:IPI00208200.2
271	LDGPIENVSEDEAQSSQR	TiATPMNP1.8273.8273.2.dta	76.88	2138.89	9,S(PhosphoST);	IPI:IPI00471864.1
272	LDSMSSVEEDDYDTLTDIDSDK	TiATPMNP2.14174.14174.2.dta TiATPMNP3.13992.13992.2.dta	106.04 94.64	2570.99 2570.99	6,S(PhosphoST); 6,S(PhosphoST);	IPI:IPI00369576.3 IPI:IPI00369576.3

273	LDFTCGSPPYAAPELFQ GK	TiATPMNP1.13677.13677.2.dta	91.11	2570.99	6,S(PhosphoST);	IPI:IPI00369576.3
		TiATPMNP1.13682.13682.2.dta	83.46	2570.99	3,S(PhosphoST);	IPI:IPI00369576.3
		TiATPMNP1.13388.13388.2.dta	66.97	2175.95	3,T(PhosphoST);	IPI:IPI00194772.1
		TiATPMNP2.13880.13880.2.dta	63.9	2175.95	3,T(PhosphoST);	IPI:IPI00194772.1
274	LGAPENSGISTLER	TiATPMNP3.9180.9180.2.dta	66.54	1521.70	11,T(PhosphoST);	IPI:IPI00766690.1
		TiATPMNP2.9357.9357.2.dta	56.53	1521.70	11,T(PhosphoST);	IPI:IPI00766690.1
275	SSEPTEDVETKEIEEGDTEPEEGSPLEEN EK	TiATPMNP2.9956.9956.3.dta	114.87	3669.49	5,T(PhosphoST);	IPI:IPI00199060.2
		TiATPMNP3.9759.9759.3.dta	114.3	3669.49	10,T(PhosphoST);	IPI:IPI00199060.2
		TiATPMNP2.10008.10008.3.dta	113.52	3669.49	10,T(PhosphoST);	IPI:IPI00199060.2
		TiATPMNP1.9438.9438.3.dta	95.07	3669.49	5,T(PhosphoST);	IPI:IPI00199060.2
		TiATPMNP3.9764.9764.3.dta	83.95	3669.49	5,T(PhosphoST);	IPI:IPI00199060.2
276	SSGSPYGGYGSGGGSGGYGSR	TiATPMNP2.8197.8197.2.dta	127.52	1988.74	4,S(PhosphoST);	IPI:IPI00382376.1
277	SSPESPEGFGSLMGPQELDR	TiATPMNP3.12647.12647.2.dta	54.93	2254.93	2,S(PhosphoST);	IPI:IPI00464904.3
		TiATPMNP1.12277.12277.2.dta	48.17	2254.93	5,S(PhosphoST);	IPI:IPI00464904.3
278	SSPPPLNGASEVAAR	TiATPMNP3.8781.8781.2.dta	52.45	1530.70	2,S(PhosphoST);	IPI:IPI00362563.3
		TiATPMNP2.8987.8987.2.dta	48.87	1530.70	2,S(PhosphoST);	IPI:IPI00362563.3
279	SSSELGMIFNER	TiATPMNP1.12995.12995.2.dta	63.78	1447.59	3,S(PhosphoST);	IPI:IPI00400738.1
		TiATPMNP2.13570.13570.2.dta	58.71	1447.59	3,S(PhosphoST);	IPI:IPI00400738.1

280	LIRPEYAWIVQPASGAVSDRPGASPK	TiATPMNP2.13564.13564.2.dta	52.93	1447.59	2,S(PhosphoST);	IPI:IPI00400738.1
		TiATPMNP3.13330.13330.2.dta	48.73	1447.59	2,S(PhosphoST);	IPI:IPI00400738.1
		TiATPMNP1.12603.12603.3.dta	81.67	2843.43	24,S(PhosphoST);	IPI:IPI00869782.2
281	LKDLGHPVEEDES GDQEDDDDELDDG DRDQDI	TiATPMNP1.9464.9464.3.dta	109.55	3835.47	14,S(PhosphoST);	IPI:IPI00324618.3
		TiATPMNP2.10034.10034.3.dta	92.69	3835.47	14,S(PhosphoST);	IPI:IPI00324618.3
		TiATPMNP1.9973.9973.2.dta	124.17	2573.04	23,S(PhosphoST);	IPI:IPI00205868.1
282	LKGQEDNLASAVDATTGQEACDSD	TiATPMNP2.11502.11502.2.dta	100.56	2266.98	13,S(PhosphoST);	IPI:IPI00734729.1
		TiATPMNP1.10947.10947.2.dta	100.44	2266.98	13,S(PhosphoST);	IPI:IPI00734729.1
		TiATPMNP3.11291.11291.2.dta	95.03	2266.98	13,S(PhosphoST);	IPI:IPI00734729.1
283	LLASPDASTLENSWSPDEEK	TiATPMNP3.18150.18150.2.dta	100.27	2757.24	5,S(PhosphoST);	IPI:IPI00366081.3
		TiATPMNP1.17571.17571.2.dta	96.92	2757.24	3,S(PhosphoST);	IPI:IPI00366081.3
		TiATPMNP2.18332.18332.2.dta	92.05	2757.24	5,S(PhosphoST);	IPI:IPI00366081.3
284	SSSLSDPLEESSPIAAIFDTENLEK	TiATPMNP2.18147.18147.2.dta	89.59	2757.24	3,S(PhosphoST);	IPI:IPI00366081.3
		TiATPMNP1.17786.17786.2.dta	86.23	2757.24	5,S(PhosphoST);	IPI:IPI00366081.3
		TiATPMNP3.17964.17964.2.dta	78.04	2757.24	3,S(PhosphoST);	IPI:IPI00366081.3
		TiATPMNP3.17985.17985.3.dta	73.26	2757.24	5,S(PhosphoST);	IPI:IPI00366081.3
		TiATPMNP1.17613.17613.3.dta	63.27	2757.24	3,S(PhosphoST);	IPI:IPI00366081.3
		TiATPMNP1.17631.17631.3.dta	59.97	2757.24	5,S(PhosphoST);	IPI:IPI00366081.3
		TiATPMNP2.18140.18140.3.dta	56.28	2757.24	3,S(PhosphoST);	IPI:IPI00366081.3
		TiATPMNP3.17925.17925.2.dta	53.59	2757.24	1,S(PhosphoST);	IPI:IPI00366081.3

285	LLKEGEPTVYSDDEEPKDEAAR	TiATPMNP2.18144.18144.3.dta	48.4	2757.24	5,S(PhosphoST);	IPI:IPI00366081.3
286	LLKPGEEPSEYTDEEDTK	TiATPMNP1.8127.8127.3.dta	52.97	2698.18	12,S(PhosphoST);	IPI:IPI00480820.4
		TiATPMNP2.8698.8698.2.dta	80.63	2157.91	12,T(PhosphoST);	IPI:IPI00373197.1
		TiATPMNP3.8550.8550.2.dta	73.83	2157.91	12,T(PhosphoST);	IPI:IPI00373197.1
		TiATPMNP3.8538.8538.3.dta	67.63	2157.91	12,T(PhosphoST);	IPI:IPI00373197.1
		TiATPMNP1.7786.7786.3.dta	63.49	2157.91	12,T(PhosphoST);	IPI:IPI00373197.1
		TiATPMNP2.8693.8693.3.dta	62.39	2157.91	12,T(PhosphoST);	IPI:IPI00373197.1
		TiATPMNP1.7781.7781.2.dta	61.62	2157.91	12,T(PhosphoST);	IPI:IPI00373197.1
287	LLKPGEEPSEYTDEEDTKDHSK	TiATPMNP3.8150.8150.2.dta	75.51	2625.13	12,T(PhosphoST);	IPI:IPI00373197.1
		TiATPMNP3.8129.8129.3.dta	53.07	2625.13	12,T(PhosphoST);	IPI:IPI00373197.1
288	LLSEQDGS�K	TiATPMNP2.8417.8417.2.dta	55.3	1167.53	8,S(PhosphoST);	IPI:IPI00207191.1
289	LVEDERSDREETESSEGEAAAGAGAK	TiATPMNP2.8082.8082.3.dta	66.44	3060.14	7,S(PhosphoST); 14,S(PhosphoST); 15,S(PhosphoST);	IPI:IPI00776466.1
		TiATPMNP3.7682.7682.3.dta	58.28	3140.11	7,S(PhosphoST); 12,T(PhosphoST); 14,S(PhosphoST); 15,S(PhosphoST);	IPI:IPI00776466.1
		TiATPMNP1.7546.7546.3.dta	57.42	3140.11	7,S(PhosphoST); 12,T(PhosphoST); 14,S(PhosphoST);	IPI:IPI00776466.1

290	LPSSPLMDR	TiATPMNP2.7996.7996.3.dta	56.18	3140.11	15,S(PhosphoST); 7,S(PhosphoST); 12,T(PhosphoST); 14,S(PhosphoST); 15,S(PhosphoST);	IPI:IPI00776466.1
		TiATPMNP1.10515.10515.2.dta	79.25	1196.50	3,S(PhosphoST); 8,M(OxidationM);	IPI:IPI00363941.1
		TiATPMNP3.10929.10929.2.dta	72.08	1196.50	3,S(PhosphoST); 8,M(OxidationM);	IPI:IPI00363941.1
		TiATPMNP3.9326.9326.2.dta	46.12	1043.42	6,S(PhosphoST);	IPI:IPI00364638.3
		TiATPMNP3.9088.9088.2.dta	91.9	1349.61	7,S(PhosphoST);	IPI:IPI00393489.2
		TiATPMNP2.9272.9272.2.dta	70.36	1349.61	7,S(PhosphoST);	IPI:IPI00393489.2
		TiATPMNP2.11900.11900.2.dta	73.72	1951.87	14,S(PhosphoST);	IPI:IPI00361601.4
		TiATPMNP1.11333.11333.2.dta	48.49	1951.87	14,S(PhosphoST);	IPI:IPI00361601.4
		TiATPMNP1.8547.8547.2.dta	66.9	1407.64	7,S(PhosphoST);	IPI:IPI00480706.3
		TiATPMNP2.15084.15084.2.dta	75.84	2280.03	1,S(PhosphoST);	IPI:IPI00231108.5
		TiATPMNP1.14545.14545.2.dta	71.51	2280.03	1,S(PhosphoST);	IPI:IPI00231108.5
		TiATPMNP3.14813.14813.2.dta	65.42	2280.03	1,S(PhosphoST);	IPI:IPI00231108.5
		TiATPMNP3.11338.11338.2.dta	46.62	1944.89	3,S(PhosphoST);	IPI:IPI00362755.4
291	LQMTTSE					
292	LSAPDLSPTGTGR					
293	LSVQDPVVVMAEDSQEK					
294	LVDSGSLAEVPK					
295	SQNNFVAILDLPEGEHQYK					
296	SQSFDPDVEPQLPQAPAR					

297	SQSLPNSLDYAQTSE	TiATPMNP2.11605.11605.2.dta	43.44	1944.89	3,S(PhosphoST);	IPI:IPI00362755.4
		TiATPMNP1.9243.9243.2.dta	108.35	1873.80	3,S(PhosphoST);	IPI:IPI00471759.1
		TiATPMNP2.9715.9715.2.dta	98.8	1873.80	3,S(PhosphoST);	IPI:IPI00471759.1
		TiATPMNP3.9922.9922.2.dta	97.16	1873.80	3,S(PhosphoST);	IPI:IPI00471759.1
		TiATPMNP2.9434.9434.2.dta	73.99	1873.80	1,S(PhosphoST);	IPI:IPI00471759.1
298	SQSSHSYDDSTLPLIDR	TiATPMNP1.10464.10464.2.dta	74.3	1998.85	3,S(PhosphoST);	IPI:IPI00359491.4
		TiATPMNP3.10783.10783.2.dta	69.01	1998.85	6,S(PhosphoST);	IPI:IPI00359491.4
		TiATPMNP2.10950.10950.2.dta	66.94	1998.85	6,S(PhosphoST);	IPI:IPI00359491.4
299	SRTSVQTEDDQLIAGQSAR	TiATPMNP3.8748.8748.2.dta	110.41	2139.97	4,S(PhosphoST);	IPI:IPI00358406.2
		TiATPMNP2.8945.8945.2.dta	103.82	2139.97	4,S(PhosphoST);	IPI:IPI00358406.2
		TiATPMNP1.8252.8252.2.dta	56.65	2219.93	1,S(PhosphoST); 4,S(PhosphoST);	IPI:IPI00358406.2
300	LVLPMDDDSEPALNSLDDTR	TiATPMNP2.13940.13940.2.dta	52.11	2178.96	8,S(PhosphoST);	IPI:IPI00358522.3
301	LWYTVDKAPDAWDYSQGFVNEEMIR	TiATPMNP3.14374.14374.3.dta	74.22	3191.33	3,Y(PhosphoY); 4,T(PhosphoST);	IPI:IPI00231662.6
		TiATPMNP1.14176.14176.3.dta	64.05	3191.33	3,Y(PhosphoY); 4,T(PhosphoST);	IPI:IPI00231662.6
302	LYCAQAEGGSEEPSGILK	TiATPMNP2.10673.10673.2.dta	74.94	2170.94	10,S(PhosphoST);	IPI:IPI00231379.2
303	LYSGGGPPPTGEEDTSEKDEL	TiATPMNP2.9553.9553.2.dta	106.7	2255.92	15,T(PhosphoST);	IPI:IPI00206624.1

304	SSASPDVLQGP	TiATPMNP3.9378.9378.2.dta	104.93	2255.92	15,T(PhosphoST);	IPI:IPI00206624.1
		TiATPMNP1.8882.8882.2.dta	88.53	2255.92	15,T(PhosphoST);	IPI:IPI00206624.1
		TiATPMNP1.9079.9079.2.dta	83.23	2255.92	16,S(PhosphoST);	IPI:IPI00206624.1
305	MAAPSPGGGGGGTGP	TiATPMNP2.8815.8815.2.dta	78.57	1516.68	2,S(PhosphoST);	IPI:IPI00364830.4
		TiATPMNP3.8506.8506.2.dta	71.07	1516.68	2,S(PhosphoST);	IPI:IPI00364830.4
		TiATPMNP1.15688.15688.3.dta	54.95	3452.38	5,S(PhosphoST); 33,S(PhosphoST); 34,S(PhosphoST);	IPI:IPI00369884.2
306	MAMPINVS	TiATPMNP1.13572.13572.2.dta	92.64	1649.74	8,S(PhosphoST);	IPI:IPI00190024.5
		TiATPMNP2.14058.14058.2.dta	85.32	1649.74	8,S(PhosphoST);	IPI:IPI00190024.5
		TiATPMNP2.11522.11522.3.dta	170.04	3705.40	1,M(OxidationM); 10,S(PhosphoST);	IPI:IPI00187860.3
307	MESEAGADDSAEEDLLDDDDNEDRGD	TiATPMNP3.11533.11533.3.dta	161.91	3689.41	10,S(PhosphoST);	IPI:IPI00187860.3
		TiATPMNP2.11664.11664.3.dta	160.06	3689.41	10,S(PhosphoST);	IPI:IPI00187860.3
		TiATPMNP1.10954.10954.3.dta	158.73	3705.40	1,M(OxidationM); 10,S(PhosphoST);	IPI:IPI00187860.3
308	MLAESDESGDEESVSQTDKTELQNTLR	TiATPMNP1.11328.11328.3.dta	156.89	3689.41	10,S(PhosphoST);	IPI:IPI00187860.3
		TiATPMNP1.10744.10744.3.dta	94.42	3170.28	5,S(PhosphoST); 8,S(PhosphoST);	IPI:IPI00870224.2

317	SPQPPVEEEDHFDDTVVCLDTYNCDLH FK	TiATPMNP3.9821.9821.2.dta	63.75	1165.54	1,S(PhosphoST);	IPI:IPI00325912.1
		TiATPMNP2.10097.10097.2.dta	54.84	1165.54	1,S(PhosphoST);	IPI:IPI00325912.1
318	SPSDYSNFDPEFLNEKPQLSFSDK	TiATPMNP2.14701.14701.3.dta	62.05	3713.51	1,S(PhosphoST);	IPI:IPI00210090.3
		TiATPMNP2.14464.14464.3.dta	101.99	2869.23	22,S(PhosphoST);	IPI:IPI00212816.5
		TiATPMNP2.14475.14475.3.dta	62.28	2869.23	20,S(PhosphoST);	IPI:IPI00212816.5
		TiATPMNP1.14054.14054.3.dta	51.49	2869.23	20,S(PhosphoST);	IPI:IPI00212816.5
319	SPSGGAAGPLLTSPQSLDGSR	TiATPMNP3.10654.10654.2.dta	53.45	2032.93	1,S(PhosphoST);	IPI:IPI00767085.2
320	SPWQPTTPSPEPEPEPEDRSSR	TiATPMNP2.9585.9585.3.dta	63.62	2681.15	22,S(PhosphoST);	IPI:IPI00212729.1
321	SQDEPVQSGMNGIPK	TiATPMNP3.8789.8789.2.dta	94.31	1664.70	1,S(PhosphoST);	IPI:IPI00202288.3
		TiATPMNP2.9549.9549.2.dta	66.53	1664.70	1,S(PhosphoST);	IPI:IPI00202288.3
322	SQENLGNLPK	TiATPMNP2.8918.8918.2.dta	50.06	1177.53	1,S(PhosphoST);	IPI:IPI00372350.1
323	SQEPISNDQKDSDDDDKEK	TiATPMNP2.7129.7129.3.dta	49.67	2155.87	12,S(PhosphoST);	IPI:IPI00209277.1
324	NLGSINTELQDQVQR	TiATPMNP1.11178.11178.2.dta	95.26	1664.77	4,S(PhosphoST);	IPI:IPI00193522.3
		TiATPMNP3.11550.11550.2.dta	90.01	1664.77	4,S(PhosphoST);	IPI:IPI00193522.3
		TiATPMNP2.11743.11743.2.dta	73.54	1664.77	4,S(PhosphoST);	IPI:IPI00193522.3
325	NLLEDDSDDEEEDFFLR	TiATPMNP2.15555.15555.2.dta	103.8	2063.81	7,S(PhosphoST);	IPI:IPI00358945.2

326	NLNNSNLFSPVNHDS ED LASPSEYPENGE R	TiATPMNP1.14906.14906.2.dta TiATPMNP3.15576.15576.2.dta	96.02 60.76	2063.81 2063.81	7,S(PhosphoST); 7,S(PhosphoST);	IPI:IPI00358945.2 IPI:IPI00358945.2
327	NLTSSSLNDISDKPEK	TiATPMNP2.12136.12136.3.dta	54.62	3423.44	20,S(PhosphoST);	IPI:IPI00197380.4
328	NPLSSNDTCSSPELQTNR	TiATPMNP3.8762.8762.2.dta	69.62	1825.82	6,S(PhosphoST);	IPI:IPI00199985.1
329	NKGSILSATGPELSHK	TiATPMNP3.8611.8611.2.dta TiATPMNP3.8605.8605.2.dta	115.44 113.01	2097.86 2097.86	11,S(PhosphoST); 10,S(PhosphoST);	IPI:IPI00948454.1 IPI:IPI00948454.1
330	NPPPPQDYESDD ES YEVLDL TE YAR	TiATPMNP3.8952.8952.3.dta	67.29	1716.83	4,S(PhosphoST);	IPI:IPI00372450.2
331	SQHSSGNGNDFEMITK	TiATPMNP2.14676.14676.2.dta TiATPMNP1.14092.14092.2.dta	79.55 76.89	2923.18 2923.18	9,S(PhosphoST); 9,S(PhosphoST);	IPI:IPI00370695.2 IPI:IPI00370695.2
332	SPGSGSQSSGWHEVEPGMPSP TT LK	TiATPMNP2.9983.9983.2.dta TiATPMNP1.9073.9073.2.dta TiATPMNP3.9693.9693.2.dta TiATPMNP3.9682.9682.2.dta	63.64 55.02 52.82 52.25	1829.72 1829.72 1829.72 1829.72	4,S(PhosphoST); 4,S(PhosphoST); 5,S(PhosphoST); 4,S(PhosphoST);	IPI:IPI00382218.1 IPI:IPI00382218.1 IPI:IPI00382218.1 IPI:IPI00382218.1
333	SPHLPA PT GLFDDDDN DS DEDDNFFMPS SSKPSK	TiATPMNP1.10763.10763.3.dta TiATPMNP2.11327.11327.3.dta	64.84 50.46	2618.12 2618.12	1,S(PhosphoST); 1,S(PhosphoST);	IPI:IPI00210163.1 IPI:IPI00210163.1
		TiATPMNP1.14692.14692.3.dta	66.58	3802.54	18,S(PhosphoST);	IPI:IPI00331898.3

334	NSSYSGDGR	TiATPMNP3.22899.22899.3.dta	54.99	1157.33	3,S(PhosphoST); 4,Y(PhosphoY);	IPI:IPI00203211.4
335	NSTLSEEDYIER	TiATPMNP1.8808.8808.2.dta TiATPMNP2.9597.9597.2.dta	66.44 52.43	1533.61 1533.61	5,S(PhosphoST); 5,S(PhosphoST);	IPI:IPI00193203.1 IPI:IPI00193203.1
336	NVPQEELEDSDVDADFK	TiATPMNP1.10155.10155.2.dta TiATPMNP2.10729.10729.2.dta	115.26 98.64	2114.84 2114.84	11,S(PhosphoST); 11,S(PhosphoST);	IPI:IPI00364414.3 IPI:IPI00364414.3
337	NYQQNYQNSEGEKNEGSESAPEGQAQ QR					
338	PGPTPSATNVGSSGRSPSK	TiATPMNP2.7849.7849.3.dta	86.32	3335.35	9,S(PhosphoST);	IPI:IPI00551815.2
339	QADLSFSPVEMK	TiATPMNP2.7787.7787.3.dta TiATPMNP2.7752.7752.3.dta TiATPMNP2.7753.7753.3.dta	61.94 52.49 48.87	1861.85 1861.85 1861.85	13,S(PhosphoST); 18,S(PhosphoST); 16,S(PhosphoST);	IPI:IPI00364983.3 IPI:IPI00364983.3 IPI:IPI00364983.3
340	QAEVADQQTTDLPAENGETENQSPASEE EK	TiATPMNP3.10857.10857.2.dta TiATPMNP2.11088.11088.2.dta	61.09 46.35	1516.64 1516.64	8,S(PhosphoST); 8,S(PhosphoST);	IPI:IPI00187860.3 IPI:IPI00187860.3
341	QAEVADQQTTDLPAENGETENQSPASEE EKEAK	TiATPMNP1.7742.7742.3.dta TiATPMNP1.7944.7944.3.dta TiATPMNP3.8617.8617.3.dta	79.91 118.18 112.22	3323.37 3651.55 3651.55	26,S(PhosphoST); 26,S(PhosphoST); 26,S(PhosphoST);	IPI:IPI00373052.2 IPI:IPI00373052.2 IPI:IPI00373052.2

342	QAEVADQQTTDLPAENGETENQSPASEE EKEAKSD	TiATPMNP2.8754.8754.3.dta	99.47	3651.55	26,S(PhosphoST);	IPI:IPI00373052.2
		TiATPMNP1.7865.7865.3.dta	76.08	3651.55	23,S(PhosphoST);	IPI:IPI00373052.2
343	QKSDAEEDGGTGSQDEEDSKPK	TiATPMNP1.8027.8027.3.dta	104.8	3853.61	34,S(PhosphoST);	IPI:IPI00373052.2
		TiATPMNP1.8058.8058.3.dta	88.22	3933.57	26,S(PhosphoST); 34,S(PhosphoST);	IPI:IPI00373052.2
344	QLSVPASDEEDEVPPVPR	TiATPMNP3.5972.5972.3.dta	56.21	2494.91	3,S(PhosphoST); 13,S(PhosphoST);	IPI:IPI00199636.1
		TiATPMNP2.6729.6729.2.dta	42.38	2494.91	3,S(PhosphoST); 13,S(PhosphoST);	IPI:IPI00199636.1
345	QSCLHPFTEDDAVDPNDSDDLDPESR	TiATPMNP2.11708.11708.2.dta	69.11	2140.98	7,S(PhosphoST);	IPI:IPI00421969.1
		TiATPMNP1.11180.11180.2.dta	55.9	2140.98	7,S(PhosphoST);	IPI:IPI00421969.1
346	QTSDDSSVGVNHVSSTTSLGEDYEDADLV NSDEVMR	TiATPMNP2.11293.11293.3.dta	50.36	2937.15	18,S(PhosphoST);	IPI:IPI00287199.3
		TiATPMNP2.11679.11679.3.dta	79.37	3837.59	3,S(PhosphoST); 34,M(OxidationM);	IPI:IPI00915549.1
347	SLSVTSLGGLPAWEAER	TiATPMNP1.12147.12147.3.dta	61.81	3821.60	15,T(PhosphoST);	IPI:IPI00915549.1
		TiATPMNP2.12806.12806.3.dta	61.35	3821.60	3,S(PhosphoST);	IPI:IPI00915549.1
348	QTSDDSSVGVNHVSSTTSLGEDYEDADLV NSDEVMR	TiATPMNP3.12533.12533.3.dta	55.12	3821.60	14,S(PhosphoST);	IPI:IPI00915549.1
		TiATPMNP2.12607.12607.3.dta	53.16	3821.60	13,S(PhosphoST);	IPI:IPI00915549.1

348	RDSVLWSDIPK	TiATPMNP1.13842.13842.2.dta	93.27	1850.87	3,S(PhosphoST);	IPI:IPI00324172.2
		TiATPMNP3.14158.14158.2.dta	87.22	1850.87	3,S(PhosphoST);	IPI:IPI00324172.2
		TiATPMNP2.14348.14348.2.dta	85.22	1850.87	3,S(PhosphoST);	IPI:IPI00324172.2
		TiATPMNP2.14425.14425.2.dta	85.06	1850.87	1,S(PhosphoST);	IPI:IPI00324172.2
349	RESLTSFGNGPLSPGGPSKPGGGGGPGS GSTSR	TiATPMNP2.12257.12257.2.dta	87.09	1393.65	3,S(PhosphoST);	IPI:IPI00209045.2
		TiATPMNP1.11634.11634.2.dta	55.55	1393.65	3,S(PhosphoST);	IPI:IPI00209045.2
		TiATPMNP3.12091.12091.2.dta	46.56	1393.65	3,S(PhosphoST);	IPI:IPI00209045.2
350	RFSVSTLR	TiATPMNP3.10371.10371.3.dta	67.21	3134.43	3,S(PhosphoST);	IPI:IPI00210027.4
		TiATPMNP1.9986.9986.3.dta	63.46	3134.43	3,S(PhosphoST);	IPI:IPI00210027.4
		TiATPMNP2.10549.10549.3.dta	48.62	3134.43	3,S(PhosphoST);	IPI:IPI00210027.4
351	RGSETEQLLTNPNGYGTQAGTSPAPTTTP EEEDLR	TiATPMNP2.9584.9584.2.dta	45.28	1043.50	3,S(PhosphoST);	IPI:IPI00202580.3
		TiATPMNP1.10840.10840.3.dta	95.84	3774.71	3,S(PhosphoST);	IPI:IPI00370827.2
		TiATPMNP3.11191.11191.3.dta	91.6	3774.71	3,S(PhosphoST);	IPI:IPI00370827.2
352	RGSETEQLLTNPNGYGTQAGTSPAPTTTP EEEDLR	TiATPMNP1.10919.10919.3.dta	79.61	3774.71	5,T(PhosphoST);	IPI:IPI00370827.2
		TiATPMNP2.11382.11382.3.dta	78.51	3774.71	3,S(PhosphoST);	IPI:IPI00370827.2
		TiATPMNP3.10689.10689.3.dta	93.27	3930.82	3,S(PhosphoST);	IPI:IPI00370827.2
		TiATPMNP1.10356.10356.3.dta	91.84	3930.82	3,S(PhosphoST);	IPI:IPI00370827.2
		TiATPMNP2.10891.10891.3.dta	89.67	3930.82	3,S(PhosphoST);	IPI:IPI00370827.2

353	RGSGDTSSLIDPDTSLSELR	TiATPMNP3.12432.12432.2.dta	128.86	2183.98	3,S(PhosphoST);	IPI:IPI00373564.3
		TiATPMNP2.12590.12590.2.dta	100.32	2183.98	3,S(PhosphoST);	IPI:IPI00373564.3
		TiATPMNP1.12133.12133.2.dta	98.04	2183.98	3,S(PhosphoST);	IPI:IPI00373564.3
		TiATPMNP1.12035.12035.3.dta	82.43	2183.98	6,T(PhosphoST);	IPI:IPI00373564.3
		TiATPMNP2.12596.12596.3.dta	58.89	2183.98	8,S(PhosphoST);	IPI:IPI00373564.3
354	RHSDLPETNTSDPETLTK	TiATPMNP2.8594.8594.2.dta	83.81	2118.94	3,S(PhosphoST);	IPI:IPI00392304.4
		TiATPMNP2.8659.8659.3.dta	80.35	2118.94	3,S(PhosphoST);	IPI:IPI00392304.4
		TiATPMNP1.7970.7970.3.dta	80.12	2118.94	3,S(PhosphoST);	IPI:IPI00392304.4
		TiATPMNP3.8425.8425.3.dta	79.1	2118.94	3,S(PhosphoST);	IPI:IPI00392304.4
		TiATPMNP3.8433.8433.2.dta	73.49	2118.94	3,S(PhosphoST);	IPI:IPI00392304.4
355	RIDISPSALR	TiATPMNP3.10192.10192.2.dta	78.43	1205.60	5,S(PhosphoST);	IPI:IPI00566166.1
		TiATPMNP2.10432.10432.2.dta	71.73	1205.60	5,S(PhosphoST);	IPI:IPI00566166.1
		TiATPMNP1.9762.9762.2.dta	65.65	1205.60	5,S(PhosphoST);	IPI:IPI00566166.1
356	RIDISPSTFR	TiATPMNP2.10745.10745.2.dta	56.08	1269.60	5,S(PhosphoST);	IPI:IPI00359323.1
		TiATPMNP1.10111.10111.2.dta	46.77	1269.60	5,S(PhosphoST);	IPI:IPI00359323.1
357	RLSENSCSLDDLEIGAGHLSSSAFNSEK	TiATPMNP3.13428.13428.3.dta	108.03	3101.35	3,S(PhosphoST);	IPI:IPI00373011.3
		TiATPMNP2.13684.13684.3.dta	77.52	3101.35	3,S(PhosphoST);	IPI:IPI00373011.3
		TiATPMNP1.13188.13188.3.dta	67.24	3101.35	3,S(PhosphoST);	IPI:IPI00373011.3
358	RLSIATLR	TiATPMNP1.9010.9010.2.dta	57.55	1007.54	3,S(PhosphoST);	IPI:IPI00196696.6
		TiATPMNP2.9989.9989.2.dta	49.47	1007.54	3,S(PhosphoST);	IPI:IPI00196696.6

359	RMKISGVGVSGLETGGPGGPGTTPGGCLP QLALK	TiATPMNP2.20196.20196.3.dta	47.14	3242.61	2,M(OxidationM); 14,T(PhosphoST);	IPI:IPI00210003.1
360	RNEAFVCKPDPSPSPSEER	TiATPMNP3.8559.8559.3.dta	73.37	2506.07	15,S(PhosphoST);	IPI:IPI00366277.2
		TiATPMNP1.7809.7809.3.dta	61.49	2506.07	17,S(PhosphoST);	IPI:IPI00366277.2
		TiATPMNP1.7803.7803.3.dta	56.17	2506.07	15,S(PhosphoST);	IPI:IPI00366277.2
361	RNSLTGEEGELAK	TiATPMNP2.8459.8459.2.dta	76.38	1481.66	3,S(PhosphoST);	IPI:IPI00365631.2
		TiATPMNP3.8175.8175.2.dta	70.39	1481.66	3,S(PhosphoST);	IPI:IPI00365631.2
362	RPAASSAAAASASASPAGGGGEAQELL EHCGVCR	TiATPMNP2.10770.10770.3.dta	51.11	3418.49	16,S(PhosphoST);	IPI:IPI00194567.6
363	RPDPDSDEDEDYER	TiATPMNP2.7788.7788.2.dta	105.79	1815.64	6,S(PhosphoST);	IPI:IPI00464500.1
364	RPPSPELLR	TiATPMNP2.6450.6450.2.dta	48.69	1142.57	4,S(PhosphoST);	IPI:IPI00194369.1
365	RPPSPEPSAK	TiATPMNP3.6028.6028.2.dta	49.81	1143.52	4,S(PhosphoST);	IPI:IPI00373419.3
366	RQDSAGPILDGAR	TiATPMNP2.8648.8648.2.dta	59.67	1433.65	4,S(PhosphoST);	IPI:IPI00370165.3
367	RSPSPYYSR	TiATPMNP1.6164.6164.2.dta	56.34	1270.47	2,S(PhosphoST); 4,S(PhosphoST);	IPI:IPI00201580.5
368	RSSASPDVLQGQPPR					

369	RTSMGGTQQQFVEGVR	TiATPMNP2.8445.8445.2.dta	76.76	1672.78	3,S(PhosphoST);	IPI:IPI00364830.4
		TiATPMNP3.8203.8203.2.dta	72.37	1672.78	3,S(PhosphoST);	IPI:IPI00364830.4
		TiATPMNP2.8460.8460.3.dta	59.04	1672.78	3,S(PhosphoST);	IPI:IPI00364830.4
		TiATPMNP1.8642.8642.2.dta	121.42	1858.83	3,S(PhosphoST);	IPI:IPI00325912.1
		TiATPMNP3.9208.9208.2.dta	91.76	1858.83	3,S(PhosphoST);	IPI:IPI00325912.1
		TiATPMNP2.9378.9378.2.dta	75.85	1858.83	3,S(PhosphoST);	IPI:IPI00325912.1
		TiATPMNP2.9374.9374.3.dta	60.09	1858.83	3,S(PhosphoST);	IPI:IPI00325912.1
		TiATPMNP1.8634.8634.3.dta	57.85	1858.83	7,T(PhosphoST);	IPI:IPI00325912.1
		TiATPMNP3.9197.9197.3.dta	52.62	1858.83	7,T(PhosphoST);	IPI:IPI00325912.1
		TiATPMNP2.9367.9367.3.dta	47.8	1858.83	7,T(PhosphoST);	IPI:IPI00325912.1
370	SMSFQGIR	TiATPMNP3.9737.9737.2.dta	48.91	1003.41	3,S(PhosphoST);	IPI:IPI00366081.3
		TiATPMNP1.9111.9111.2.dta	89.57	2456.97	3,S(PhosphoST);	IPI:IPI00196684.3
		TiATPMNP2.9728.9728.2.dta	73.26	2456.97	3,S(PhosphoST);	IPI:IPI00196684.3
		TiATPMNP3.9524.9524.2.dta	71.11	2456.97	3,S(PhosphoST);	IPI:IPI00196684.3
		TiATPMNP1.9186.9186.3.dta	54.25	2456.97	3,S(PhosphoST);	IPI:IPI00196684.3
		TiATPMNP3.14583.14583.2.dta	136.58	2347.02	1,S(PhosphoST);	IPI:IPI00372341.3
		TiATPMNP2.14734.14734.2.dta	135.94	2347.02	1,S(PhosphoST);	IPI:IPI00372341.3
		TiATPMNP1.14443.14443.2.dta	132.81	2347.02	1,S(PhosphoST);	IPI:IPI00372341.3
		TiATPMNP3.14596.14596.2.dta	77.86	2347.02	6,T(PhosphoST);	IPI:IPI00372341.3
		TiATPMNP2.20272.20272.2.dta	74.95	2347.02	6,T(PhosphoST);	IPI:IPI00372341.3
371	RVSVCAETFPDEEDNDPR	TiATPMNP1.9236.9236.2.dta	112.96	2167.99	14,S(PhosphoST);	IPI:IPI00231962.1
		TiATPMNP3.9737.9737.2.dta	48.91	1003.41	3,S(PhosphoST);	IPI:IPI00366081.3
		TiATPMNP1.9111.9111.2.dta	89.57	2456.97	3,S(PhosphoST);	IPI:IPI00196684.3
		TiATPMNP2.9728.9728.2.dta	73.26	2456.97	3,S(PhosphoST);	IPI:IPI00196684.3
		TiATPMNP3.9524.9524.2.dta	71.11	2456.97	3,S(PhosphoST);	IPI:IPI00196684.3
		TiATPMNP1.9186.9186.3.dta	54.25	2456.97	3,S(PhosphoST);	IPI:IPI00196684.3
		TiATPMNP3.14583.14583.2.dta	136.58	2347.02	1,S(PhosphoST);	IPI:IPI00372341.3
		TiATPMNP2.14734.14734.2.dta	135.94	2347.02	1,S(PhosphoST);	IPI:IPI00372341.3
		TiATPMNP1.14443.14443.2.dta	132.81	2347.02	1,S(PhosphoST);	IPI:IPI00372341.3
		TiATPMNP3.14596.14596.2.dta	77.86	2347.02	6,T(PhosphoST);	IPI:IPI00372341.3
372	SAEDLTEGSYDAILSAEQLEK	TiATPMNP2.20272.20272.2.dta	74.95	2347.02	6,T(PhosphoST);	IPI:IPI00372341.3
		TiATPMNP1.9236.9236.2.dta	112.96	2167.99	14,S(PhosphoST);	IPI:IPI00231962.1
		TiATPMNP3.9737.9737.2.dta	48.91	1003.41	3,S(PhosphoST);	IPI:IPI00366081.3
		TiATPMNP1.9111.9111.2.dta	89.57	2456.97	3,S(PhosphoST);	IPI:IPI00196684.3
		TiATPMNP2.9728.9728.2.dta	73.26	2456.97	3,S(PhosphoST);	IPI:IPI00196684.3
		TiATPMNP3.9524.9524.2.dta	71.11	2456.97	3,S(PhosphoST);	IPI:IPI00196684.3
		TiATPMNP1.9186.9186.3.dta	54.25	2456.97	3,S(PhosphoST);	IPI:IPI00196684.3
		TiATPMNP3.14583.14583.2.dta	136.58	2347.02	1,S(PhosphoST);	IPI:IPI00372341.3
		TiATPMNP2.14734.14734.2.dta	135.94	2347.02	1,S(PhosphoST);	IPI:IPI00372341.3
		TiATPMNP1.14443.14443.2.dta	132.81	2347.02	1,S(PhosphoST);	IPI:IPI00372341.3
373	SAFTPATATGSSPSVVLQGGEK	TiATPMNP3.14596.14596.2.dta	77.86	2347.02	6,T(PhosphoST);	IPI:IPI00372341.3
		TiATPMNP2.20272.20272.2.dta	74.95	2347.02	6,T(PhosphoST);	IPI:IPI00372341.3
		TiATPMNP1.9236.9236.2.dta	112.96	2167.99	14,S(PhosphoST);	IPI:IPI00231962.1
		TiATPMNP3.9737.9737.2.dta	48.91	1003.41	3,S(PhosphoST);	IPI:IPI00366081.3
		TiATPMNP1.9111.9111.2.dta	89.57	2456.97	3,S(PhosphoST);	IPI:IPI00196684.3
		TiATPMNP2.9728.9728.2.dta	73.26	2456.97	3,S(PhosphoST);	IPI:IPI00196684.3
		TiATPMNP3.9524.9524.2.dta	71.11	2456.97	3,S(PhosphoST);	IPI:IPI00196684.3
		TiATPMNP1.9186.9186.3.dta	54.25	2456.97	3,S(PhosphoST);	IPI:IPI00196684.3
		TiATPMNP3.14583.14583.2.dta	136.58	2347.02	1,S(PhosphoST);	IPI:IPI00372341.3
		TiATPMNP2.14734.14734.2.dta	135.94	2347.02	1,S(PhosphoST);	IPI:IPI00372341.3

374	SASADNLILPR	TiATPMNP2.9830.9830.2.dta TiATPMNP3.9649.9649.2.dta	105.71 98.82	2167.99 2167.99	14,S(PhosphoST); 14,S(PhosphoST);	IPI:IPI00231962.1 IPI:IPI00231962.1
375	SASPAPADVAPAQEDLR	TiATPMNP1.9791.9791.2.dta TiATPMNP2.10624.10624.2.dta TiATPMNP3.10364.10364.2.dta	68.44 62.61 58.21	1234.58 1234.58 1234.58	3,S(PhosphoST); 3,S(PhosphoST); 3,S(PhosphoST);	IPI:IPI00364913.2 IPI:IPI00364913.2 IPI:IPI00364913.2
376	SASDSTSEELNAQDSPK	TiATPMNP3.8809.8809.2.dta TiATPMNP2.8960.8960.2.dta TiATPMNP3.8802.8802.2.dta	103.07 91.04 78.99	1772.79 1772.79 1772.79	3,S(PhosphoST); 3,S(PhosphoST); 1,S(PhosphoST);	IPI:IPI00193648.3 IPI:IPI00193648.3 IPI:IPI00193648.3
377	SPASMGIIQR	TiATPMNP2.8150.8150.2.dta	98.77	1843.72	3,S(PhosphoST);	IPI:IPI00200898.3
378	SDAEEDGGTGSQDEEDSKPK	TiATPMNP3.9241.9241.2.dta TiATPMNP2.9515.9515.2.dta	69.51 67.08	1137.51 1137.51	4,S(PhosphoST); 4,S(PhosphoST);	IPI:IPI00363908.3 IPI:IPI00363908.3
379	SDEEDEDSDFGEEQR	TiATPMNP3.6013.6013.2.dta TiATPMNP2.6994.6994.2.dta TiATPMNP3.6019.6019.3.dta TiATPMNP2.6967.6967.3.dta	96.89 76.53 76.46 64.14	2158.79 2158.79 2158.79 2158.79	9,T(PhosphoST); 11,S(PhosphoST); 11,S(PhosphoST); 11,S(PhosphoST);	IPI:IPI00199636.1 IPI:IPI00199636.1 IPI:IPI00199636.1 IPI:IPI00199636.1
380	SDRSGQGDSLYPVGYLDK	TiATPMNP2.8146.8146.2.dta	96.85	1864.60	8,S(PhosphoST);	IPI:IPI00205564.1
381	SDSLRPALNSPVERPGTDLEEGEASVQTE	TiATPMNP1.11119.11119.2.dta TiATPMNP3.11510.11510.2.dta	69.96 46.12	2091.90 2091.90	5,S(PhosphoST); 5,S(PhosphoST);	IPI:IPI00766458.2 IPI:IPI00766458.2

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382 SDSSTEESGQDVLENTFSQK

TiATPMNP2.10870.10870.3.dta	51.93	3317.53	3,S(PhosphoST);	IPI:IPI00365150.5
TiATPMNP2.11816.11816.2.dta	121.82	2265.90	4,S(PhosphoST);	IPI:IPI00211776.1
TiATPMNP2.11811.11811.2.dta	120.53	2265.90	3,S(PhosphoST);	IPI:IPI00211776.1
TiATPMNP3.11785.11785.2.dta	104.02	2265.90	4,S(PhosphoST);	IPI:IPI00211776.1
TiATPMNP3.11593.11593.2.dta	92.65	2265.90	5,T(PhosphoST);	IPI:IPI00211776.1
TiATPMNP3.11794.11794.2.dta	83.79	2265.90	3,S(PhosphoST);	IPI:IPI00211776.1
TiATPMNP1.11431.11431.2.dta	61.25	2265.90	3,S(PhosphoST);	IPI:IPI00211776.1
TiATPMNP1.11452.11452.2.dta	47.2	2265.90	5,T(PhosphoST);	IPI:IPI00211776.1

383 SDSVSNLESEDSVVTK

TiATPMNP1.10096.10096.2.dta	114.91	1886.83	1,S(PhosphoST);	IPI:IPI00951744.1
TiATPMNP3.10488.10488.2.dta	111.99	1886.83	1,S(PhosphoST);	IPI:IPI00951744.1
TiATPMNP2.10692.10692.2.dta	97.14	1886.83	3,S(PhosphoST);	IPI:IPI00951744.1
TiATPMNP1.10089.10089.2.dta	94.55	1886.83	3,S(PhosphoST);	IPI:IPI00951744.1
TiATPMNP3.10462.10462.2.dta	93.62	1886.83	3,S(PhosphoST);	IPI:IPI00951744.1

384 SPDEATAADQSEDDLASR

TiATPMNP3.7992.7992.2.dta	106.51	2171.83	12,S(PhosphoST);	IPI:IPI00766690.1
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385 SEPDDLLFDLNLSSQK

TiATPMNP1.17102.17102.2.dta	65.16	2061.87	1,S(PhosphoST);	IPI:IPI00194277.3
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386 SEQPLSQVLP TLSPEHK

TiATPMNP2.12517.12517.2.dta	60.21	1967.95	13,S(PhosphoST);	IPI:IPI00368692.5
TiATPMNP3.12316.12316.2.dta	60.04	1967.95	13,S(PhosphoST);	IPI:IPI00368692.5

387 SESKEDVFG LVPFEEITGSQQQQQK

TiATPMNP2.16154.16154.3.dta	66.65	2916.33	3,S(PhosphoST);	IPI:IPI00558325.3
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388 SESPEPGYVVTSSG LLLPVLLPR

389	SESSGNLPSIVDTR	TiATPMNP1.17279.17279.2.dta	76.79	2488.27	3,S(PhosphoST);	IPI:IPI00366955.4
		TiATPMNP2.17838.17838.2.dta	59.52	2488.27	1,S(PhosphoST);	IPI:IPI00366955.4
		TiATPMNP2.17852.17852.3.dta	50.45	2488.27	3,S(PhosphoST);	IPI:IPI00366955.4
		TiATPMNP3.10161.10161.2.dta	69.07	1539.67	1,S(PhosphoST);	IPI:IPI00213479.3
		TiATPMNP2.10406.10406.2.dta	55.49	1539.67	1,S(PhosphoST);	IPI:IPI00213479.3
390	SESTQPLLDSEERPEDLQLVDSVDSGDEI LPR	TiATPMNP2.15074.15074.3.dta	58.12	3646.67	3,S(PhosphoST);	IPI:IPI00215135.2
391	SFDQLTPEESKER	TiATPMNP2.8968.8968.2.dta	65.95	1643.70	10,S(PhosphoST);	IPI:IPI00554194.1
		TiATPMNP3.8637.8637.2.dta	47.95	1643.70	10,S(PhosphoST);	IPI:IPI00554194.1
392	SFTSGPGAR	TiATPMNP1.6282.6282.2.dta	64.78	957.38	1,S(PhosphoST);	IPI:IPI00389571.6
		TiATPMNP3.6487.6487.2.dta	48.09	957.38	1,S(PhosphoST);	IPI:IPI00389571.6
393	SGDETPGSEAPGDK	TiATPMNP2.7252.7252.2.dta	76.62	1424.52	1,S(PhosphoST);	IPI:IPI00360386.4
		TiATPMNP3.6258.6258.2.dta	64.5	1424.52	1,S(PhosphoST);	IPI:IPI00360386.4
394	SGKLSQELDFVSHNVR	TiATPMNP1.12321.12321.2.dta	91.05	1893.89	5,S(PhosphoST);	IPI:IPI00205022.1
		TiATPMNP1.12429.12429.3.dta	79.78	1893.89	5,S(PhosphoST);	IPI:IPI00205022.1
		TiATPMNP3.12590.12590.2.dta	78.59	1893.89	5,S(PhosphoST);	IPI:IPI00205022.1
		TiATPMNP3.12660.12660.3.dta	76.06	1893.89	5,S(PhosphoST);	IPI:IPI00205022.1
		TiATPMNP2.12807.12807.3.dta	75.74	1893.89	5,S(PhosphoST);	IPI:IPI00205022.1
		TiATPMNP2.12869.12869.2.dta	75.15	1893.89	5,S(PhosphoST);	IPI:IPI00205022.1
		TiATPMNP3.12576.12576.3.dta	60.2	1893.89	1,S(PhosphoST);	IPI:IPI00205022.1

TiATPMNP2.15563.15563.2.dta	84.53	1883.88	3,S(PhosphoST);	IP1:IP100210881.1
TiATPMNP2.15770.15770.2.dta	70.41	1883.88	1,S(PhosphoST);	IP1:IP100210881.1
TiATPMNP1.15019.15019.2.dta	67.65	1883.88	1,S(PhosphoST);	IP1:IP100210881.1
TiATPMNP1.15014.15014.2.dta	67.6	1883.88	3,S(PhosphoST);	IP1:IP100210881.1
TiATPMNP3.15473.15473.2.dta	61.15	1883.88	3,S(PhosphoST);	IP1:IP100210881.1
TiATPMNP3.15468.15468.2.dta	53.42	1883.88	1,S(PhosphoST);	IP1:IP100210881.1
TiATPMNP1.15041.15041.3.dta	53.14	1883.88	3,S(PhosphoST);	IP1:IP100210881.1
TiATPMNP3.15352.15352.3.dta	52.35	1883.88	3,S(PhosphoST);	IP1:IP100210881.1

TiATPMNP3.6298.6298.2.dta	60.71	1090.47	1,S(PhosphoST);	IPI:IPI00365366.2
TiATPMNP2.7191.7191.2.dta	51.5	1090.47	1,S(PhosphoST);	IPI:IPI00365366.2

TiATPMNP3.9001.9001.3.dta	66.93	2610.10	20,S(PhosphoST); IPI:IP100193369.1
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TiATPMNP3.6077.6077.2.dta	61.98	1154.51	4,S(PhosphoST);	IPI:IPI00214787.1
TiATPMNP2.6547.6547.2.dta	51.06	1154.51	4,S(PhosphoST);	IPI:IPI00214787.1

TiATPMNP3.15116.15116.3.dta	60.9	4194.89	3,S(PhosphoST);	IPI:IPI00360386.4
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TiATPMNP2.14019.14019.2.dta	128.44	2719.09	10,T(PhosphoST);	IPI: IPI00209527.3
TiATPMNP1.13454.13454.2.dta	119.61	2719.09	10,T(PhosphoST);	IPI: IPI00209527.3

Sample	Wavelength (nm)	Fluorescence Intensity (a.u.)	Excitation Wavelength (nm)	Excitation Intensity (a.u.)
TiATPMNP2	10913.3	3.0	2399.05	7.5(PhosphoST);
TiATPMNP3	10743.3	3.0	49.93	7.5(PhosphoST);
TiATPMNP2	10913.3	3.0	2399.05	7.5(PhosphoST);
TiATPMNP3	10743.3	3.0	49.93	7.5(PhosphoST);

396 SHTGEAIAAR397 SKEPSPGTDDVFTPGPSDSPGSOR398 SKESLQEAGK

399 SKPPPEEEAKDEEDQTLVNLDTYSD
LHFQISK

400 SLAALDALNTDDENDEEEYEAWK401 SLAPDLSDDDEHDPVDSISRPR

402	SLPKEEVASEPEEAASPIITPK	TiATPMNP2.9631.9631.2.dta	71.39	2287.08	9,S(PhosphoST);	IPI:IPI00357923.3
		TiATPMNP1.9065.9065.2.dta	64.44	2287.08	9,S(PhosphoST);	IPI:IPI00357923.3
		TiATPMNP1.8875.8875.2.dta	56.17	2367.04	9,S(PhosphoST);	IPI:IPI00357923.3
					16,S(PhosphoST);	
403	SLQQLAEER	TiATPMNP2.9610.9610.3.dta	53.25	2287.08	9,S(PhosphoST);	IPI:IPI00357923.3
		TiATPMNP2.9151.9151.2.dta	76.27	1151.51	1,S(PhosphoST);	IPI:IPI00209258.5
404	SLSPGGAALGYR	TiATPMNP3.8790.8790.2.dta	67.91	1151.51	1,S(PhosphoST);	IPI:IPI00209258.5
		TiATPMNP3.9399.9399.2.dta	80.59	1226.56	3,S(PhosphoST);	IPI:IPI00763238.1
405	SLSPGKENINSLEVEK	TiATPMNP1.9326.9326.2.dta	60.84	1821.86	3,S(PhosphoST);	IPI:IPI00370658.1
		TiATPMNP3.9676.9676.2.dta	50.06	1821.86	3,S(PhosphoST);	IPI:IPI00370658.1
406	SLSPPPWEQER	TiATPMNP1.10431.10431.2.dta	53.29	1306.55	3,S(PhosphoST);	IPI:IPI00365808.4
		TiATPMNP3.10710.10710.2.dta	49.99	1306.55	3,S(PhosphoST);	IPI:IPI00365808.4
		TiATPMNP2.11123.11123.2.dta	45.69	1306.55	3,S(PhosphoST);	IPI:IPI00365808.4

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