

Supplementary information

Chemicals and reagents

1,3,5-Tris(4-aminophenyl) benzene (TAPB), trifluoroacetic acid (TFA), Albumin from bovine serum (BSA), Horseradish peroxidase (HRP), iodoacet-amide (IAA), dithiothreitol (DTT), and trypsin were purchased from Sigma-Aldrich (USA). Iron chloride hexahydrate ($\text{FeCl}_3 \cdot 6\text{H}_2\text{O}$), ethylene glycol (EG), anhydrous sodium acetate (NaAc), 2,5-Dihydroxybenzoic acid (DHB), ammonium 2-Aminoterephthalic acid ($\text{H}_2\text{BDC-NH}_2$), Sodium hydroxide (NaOH), Phosphoserine (PS), Succinic anhydride (SA), and bicarbonate (NH_4HCO_3) were purchased from Aladdin (Shanghai, China). PNGase F was obtained from Genetimes Technology (Shanghai, China). Acetonitrile (ACN), acetic acid (HAc), anhydrous tetrahydrofuran (THF), ethanol (EtOH), 2,5-Dihydroxyterephthalaldehyde (Dta), and Zirconium oxychloride octahydrate ($\text{ZrOCl}_2 \cdot 8\text{H}_2\text{O}$) were purchased from Macklin (Shanghai, China). Acetone was obtained from HUZHO SHUANGLIN CHEMICAL TECHNOLOGY CO., LTD. The serums were obtained from The Affiliated Hospital of Medical School, Ningbo University, with the approval from its Ethics Committee (KS20227002).

Pre-treatment of samples

5 mg of HRP was dissolved in 0.5 mL of H_2O and denatured at 100 °C for 10 min. Then NH_4HCO_3 (50 mM, 0.5 mL) and Trypsin (1mg mL^{-1} , 0.125 mL) were added, and the HRP tryptic digest was obtained by enzymolysis at 37 °C for 16 h.

According to the classical method, BSA is pretreated with DTT and IAA. The BSA (50 mg) dispersed in NH_4HCO_3 (50 mM, 2.5 mL) was boiled and denatured at 100 °C for 10 minutes. A mixture of DTT (200 mM, 0.25 mL) and NH_4HCO_3 (50 mM, 2.25 mL) is then added and shaken at 37 °C for 1 h. Finally, trypsin (1mg mL^{-1} , 125 μL) was added and subjected to enzymatic degradation

for 16 h at 37 °C away from light.

1 mg serum was diluted in NH_4HCO_3 (50 mM) buffer and denatured in 100 °C boiling water for 15 min. The mixture was reduced by DTT at 37 °C for 1 h and alkylated by IAA at 37 °C for 1 h in the dark. Then the obtained mixture was incubated with trypsin (trypsin/protein is 1/40, w/w) at 37 °C for 16 h. Tryptic digests were lyophilized for further enrichment and analysis.

Enrichment procedures for standard samples and actual samples

1 mg of $\text{Fe}_3\text{O}_4@\text{COF}@\text{MOF-PS}$ was ultrasonically dispersed in 100 μL of loading buffer (ACN: TFA: H_2O = 95:1:4, V/V/V), 500 μg of biosample digest was added and the solution was shaken for 2 h at 37 °C. The supernatant was removed by centrifugation and washed several times with loading buffer (ACN: TFA: H_2O = 95:1:4, V/V/V). Then 10 μL of eluting buffer (ACN: TFA: H_2O = 30:0.1:69.9, V/V/V) was added and incubated at 37 °C for 1 h and repeated again. The eluate was collected, desalted and lyophilized for later use.

MALDI-TOF MS and Nano-LC-MS/MS analysis

An autoflex maX (Bruker Daltonics, U.S.A) was used for the MALDI-TOF MS analysis, and the spectra were gained in positive ion mode with an Nd:YAG laser (383 nm). The repetition rate was 1000 Hz and the acceleration voltage was 20 kV. The concentration of matrix DHB was 10 mg mL^{-1} , (Solvent with ACN/ H_2O /TFA = 20/79.9/0.1, v/v/v).

The experiments were conducted on an EASY-nLCTM 1200 system (Thermo Scientific, USA) coupled with an Orbitrap Fusion Lumos mass spectrometer (Thermo Finnigan, San Jose, CA) with nanoelectrospray ion source. Solvent A (water with 0.1% formic acid) and solvent B (ACN with 0.1% formic acid) were prepared. The deglycosylated peptides (10 μL) were loaded by the autosampler into the trap column (Thermo Scientific, 100 $\mu\text{m} \times 2 \text{ cm}$, 5 μm , 100 Å, °C18), with a

flow of 8 μ L/min for 4 min and subsequently separated on the analytical column (Thermo Scientific, 75 μ m $\times$ 25 cm, 5 μ m, 100 Å, °C18). The relevant liquid gradient was as follows: from 0 min to 40 min, the linear gradient was from 5% B to 28% B; from 40 min to 42 min, the linear gradient was from 28% B to 90% B, and from 42 min to 60 min, solvent B was kept at 90%. The flow rate was 300 nL/min, and the column temperature was maintained at 40 °C. The electrospray voltage was operated at 2.0 kV with the ion transfer capillary at 300 °C. The mass spectrometer was run in positive mode. Full-scan MS spectra (m/z 350–1800) were acquired in the Orbitrap with a resolution of 120,000 at m/z 200, scan mode set at top speed, the microscans were set at 1. The AGC target was set to 4e5, and the maximum injection time was 50 ms, the number of scan ranges set at 1, dynamic exclusion of 40.0 s, data-dependent mode set at cycle time, and the time between master scans set at 3 s. The mass-to-charge ratios of peptides and peptide fragments were gathered in line with the following strategy: the MS2 scan was performed at the same time as the master scan, the cycle time was 3 s. The intensity threshold was 5e4 and the MS2 activation type was HCD, the MS2 resolution was 50,000 at m/z 200. The microscans were set at 1, the maximum injection time was 105 ms, and the AGC target was set to 1e5. The isolation window was 1.6 m/z , the HCD collision energy was 35% and first mass was set at 110 m/z .

Database search and data analysis

The original data of mass spectrometry analysis was RAW file, and the built-in software Proteome Discoverer 2.4 (Thermo Scientific) was used for library identification and quantitative analysis. The uniprot database is used this time: uniprot_human_20210621_202249.fasta. When searching the library, submitting the RAW file to SequestHT through Proteome Discoverer,

selecting the established database, and then searching the database. The search parameters were as follows: monoisotopic mass, trypsin digestion, maximum 2 missing cut sites, peptides Charged number: 2+, 3+ and 4+, fixed modification to carbamidomethylation (C), dynamic modification to oxidation (M), Acethyl (protein N-term) and Deamidated [N]. The maximum error of the precursor ion was 10 ppm, and the maximum error of the fragment ion was 0.05 Da. Proteome Discoverer 2.4 performs Peptide high Confidence screening based on the peptide identification results and outputted the results.

Fe₃O₄@COF@MOF-PS characterization

Scanning electron microscopy (SEM, Keol 2012 microscope), transmission electron microscopy (TEM, JEOL 1011 microscopy and JEM-1400plus, Japan), Fourier transform infrared spectra (FT-IR, Thermo Fisher Scientific 10 infrared spectrometer analysis), X-ray diffraction (XRD, Bruker XRD (D4)), water contact angles (Dataphysics OCA20, Germany). X-ray photoelectron spectroscopy (XPS) by operating a Thermo Kalpha X-ray photoelectron spectrometer were employed to identify the existence of certain specific elements.

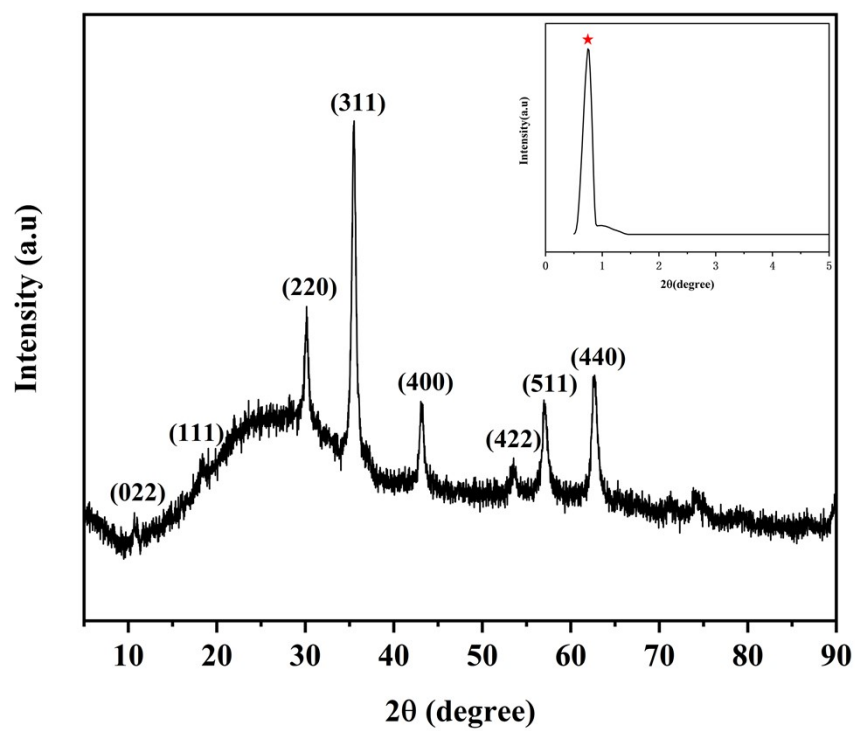


Fig. S1. The XRD analysis spectra of Fe₃O₄@COF@MOF-PS. “★” indicates peaks associated with COF.

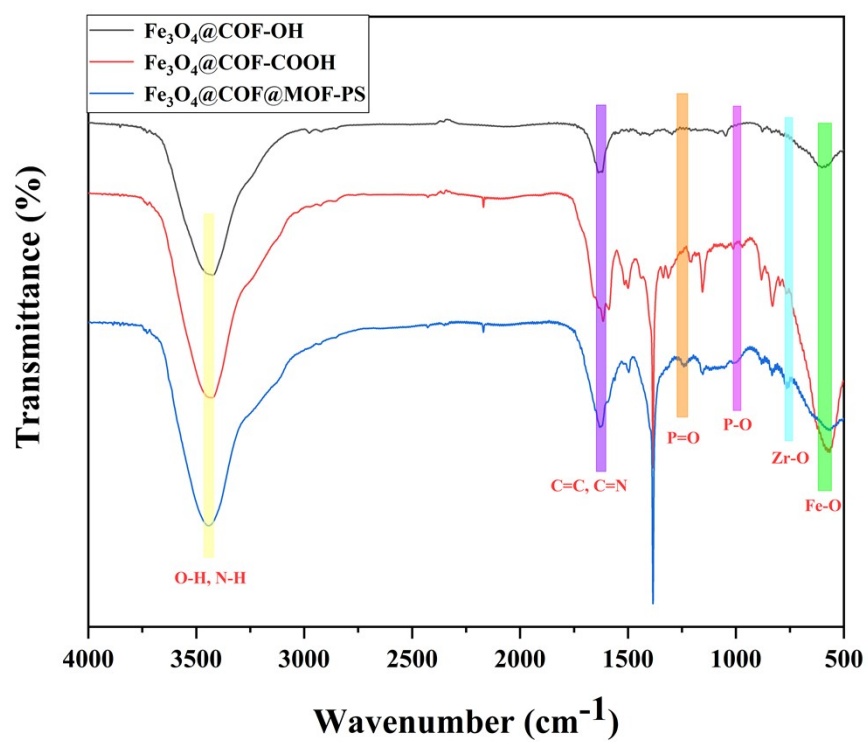


Fig. S2. The FT-IR spectra of $\text{Fe}_3\text{O}_4@\text{COF}@\text{MOF-PS}$.

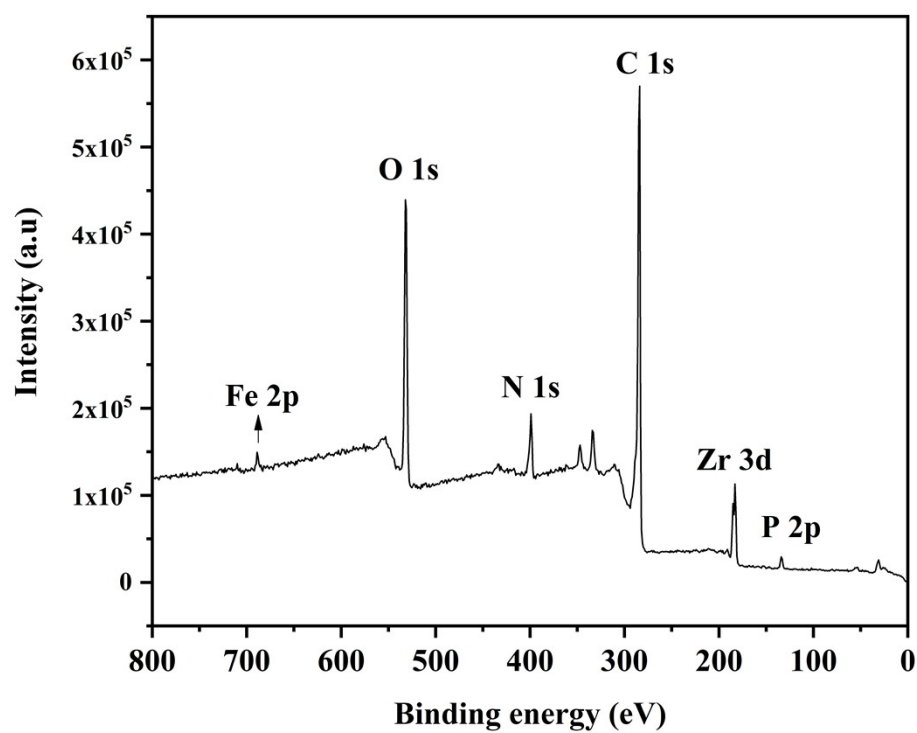


Fig. S3. The XPS image of $\text{Fe}_3\text{O}_4@\text{COF}@\text{MOF-PS}$.

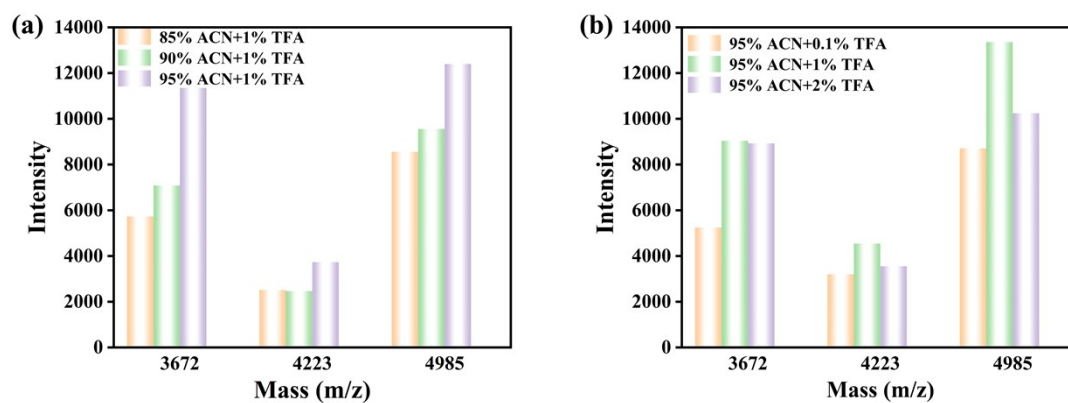


Fig. S4. Optimization of enrichment of N-glycopeptides (a, b) by $\text{Fe}_3\text{O}_4@\text{COF}@\text{MOF-PS}$ with different loading buffer.

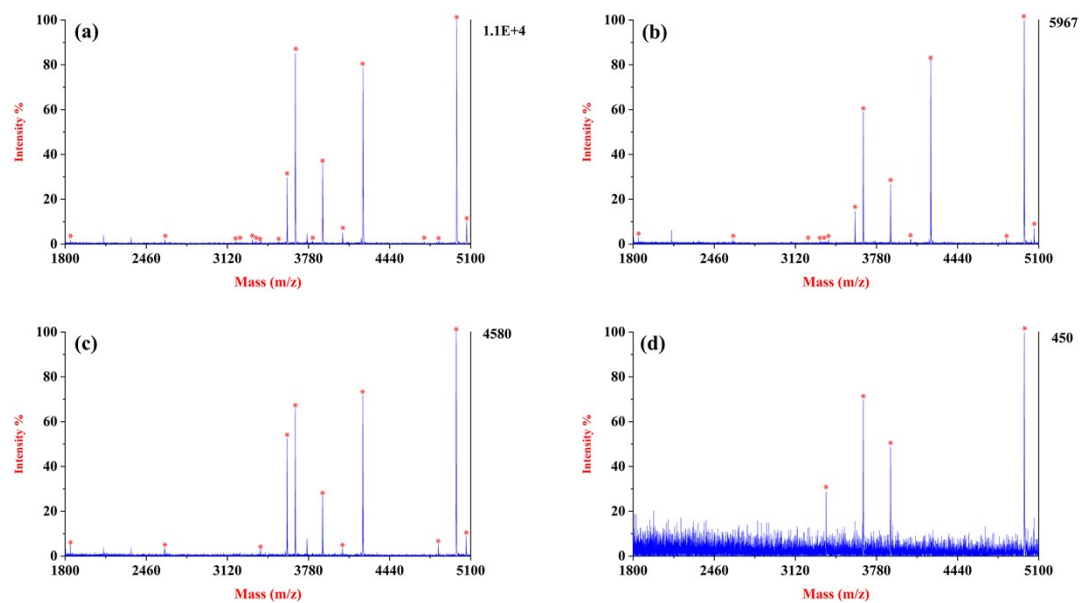


Fig. S5. MS spectra of the mixture of HRP tryptic digest and BSA protein with a mass ratio after the enrichment by $\text{Fe}_3\text{O}_4@\text{COF}@\text{MOF-PS}$: (a) 1:250, (b) 1:1000, (c) 1:5000, and (d) 1:10000. N-glycopeptides peaks are signed as “*”.

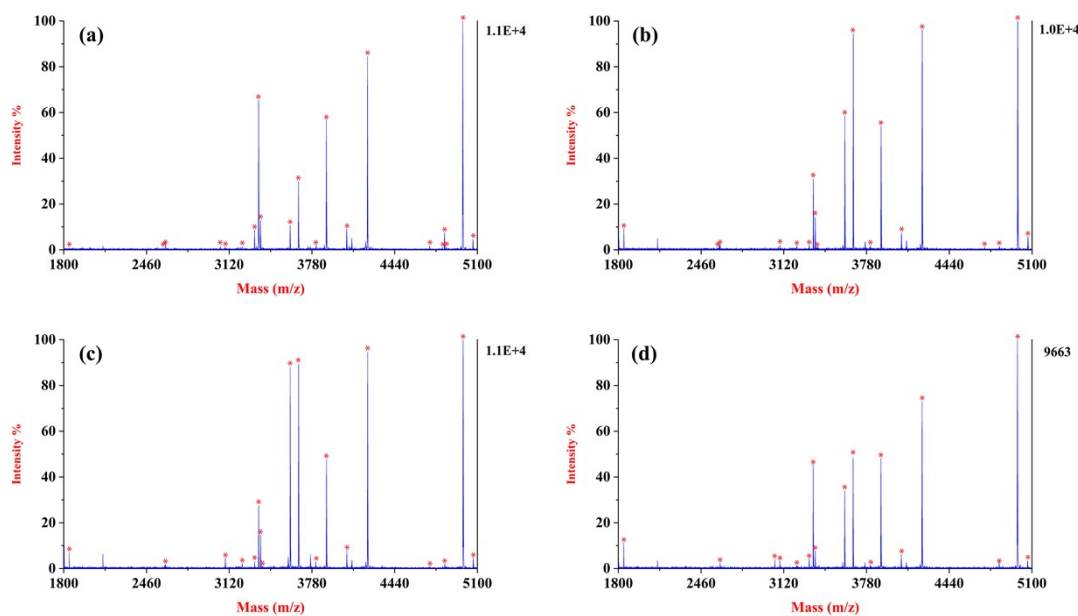


Fig. S6. MS spectra analysis of glycopeptides from HRP tryptic digest after enriched by $\text{Fe}_3\text{O}_4@\text{COF}@\text{MOF-PS}$: (a) The first time, (b) The fourth time, (c) The seventh time, and (d) The tenth time. N-glycopeptides peaks are signed as “*”.

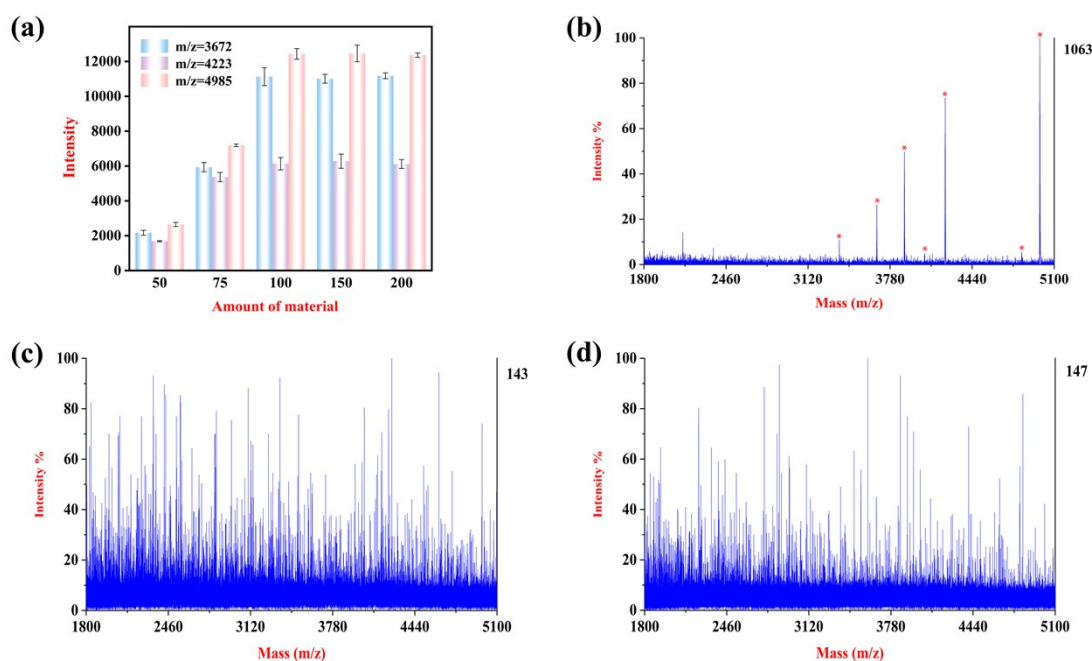


Fig. S7. (a) The loading capacity of Fe₃O₄@COF@MOF-PS for N-glycopeptides: different amounts of material (50, 75, 100, 150, and 200 µg) were used to enrich N-glycopeptides from the same amount of HRP digests. MS spectra of the supernatant after the loading capacity experiment was enriched again by Fe₃O₄@COF@MOF-PS: (b) 75 µg, (c) 100 µg, and (d) 150 µg. N-glycopeptides peaks are signed as “*”.

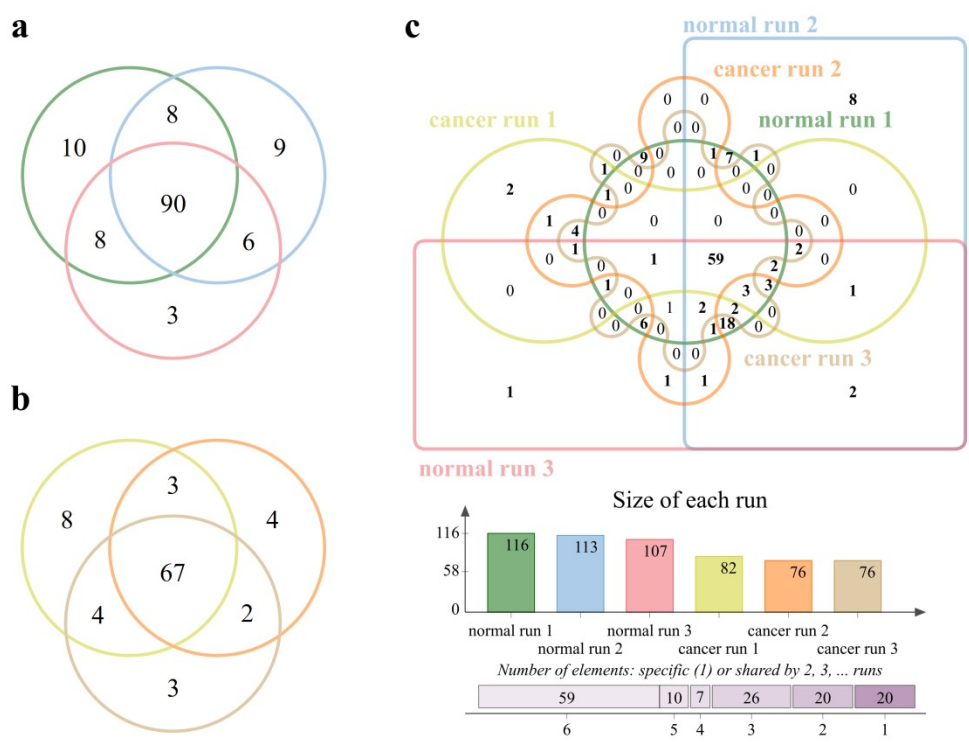


Fig. S8. Venn diagrams of the identified glycoproteins: a) enriched from healthy person (n = 3); b) enriched from cervical cancer patient (n = 3); c) enriched from healthy person and cervical cancer patient.

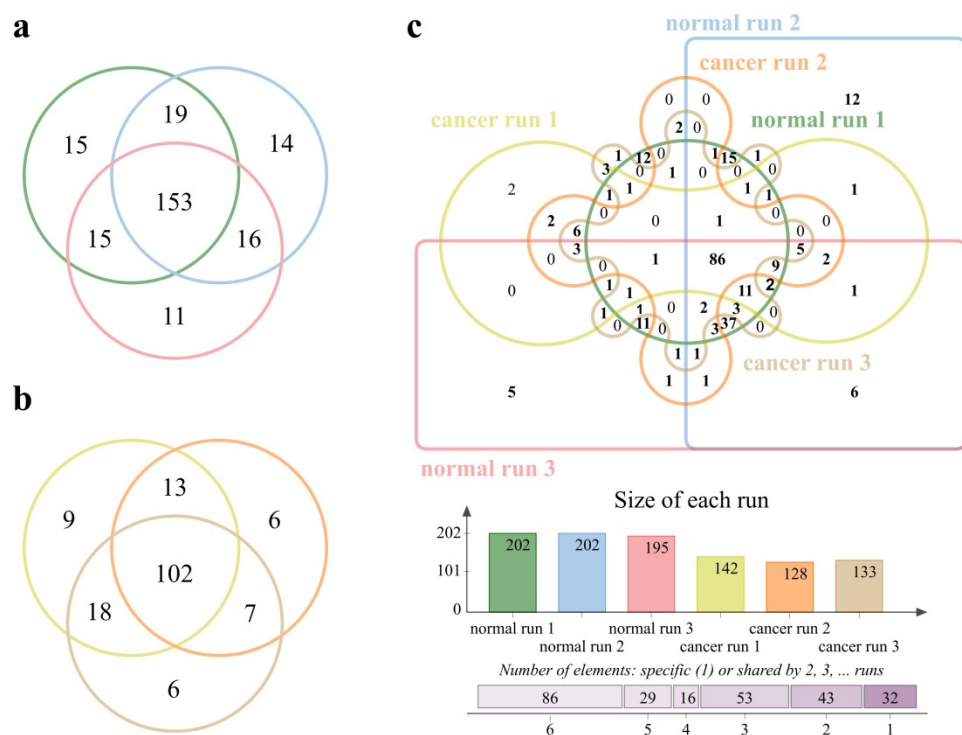


Fig. S9. Venn diagrams of the identified glycosylation sites: a) enriched from healthy person ($n = 3$); b) enriched from cervical cancer patient ($n = 3$); c) enriched from healthy person and cervical cancer patient.

Table S1. Detailed information of the observed N-glycopeptides derived from HRP tryptic digest.

“N#”: N-glycosylation site.

No.	Observed m/z	Sequence Glycan composition	Amino acid sequence
1	1842	XylMan ₃ FucGlcNAc ₂	NVGLN#R
2	2591	XylMan ₃ FucGlcNAc ₂	PTLN#TTYLQTLR
3	2612	XylMan ₃ GlcNAc ₂	MGN#ITPLTGTQGQIR
4	3088	XylMan ₃ FucGlcNAc ₂	GLCPLNGN#LSALVDFDLR
5	3208	XylMan ₃ GlcNAc ₂	SFAN#STQTFFNAFVEAMDR
6	3223	Man ₃ FucGlcNAc ₂	SFAN#STQTFFNAFVEAMDR
7	3323	XylMan ₃ FucGlcNAc ₂	QLTPTFYDNSCPN#VSNIVR
8	3354	XylMan ₃ FucGlcNAc ₂	SFAN#STQTFFNAFVEAMDR
9	3369	XylMan ₃ FucGlcNAc ₂	SFAN#STQTFFNAFVEAM*DR
10	3390	XylMan ₆ Fuc ₂ GlcNAc ₄	DSFRNVGLN#R
11	3606	XylMan ₃ FucGlcNAc ₂	NQCRGLCPLNGN#LSALVDFDLR
12	3672	XylMan ₃ FucGlcNAc ₂	GLIQSDQELFSSPN#ATDTIPLVR
13	3812	XylMan ₃ FucGlcNAc ₂	LHFHDCFVNGCDASILLDN#TTSFR
14	3895	XylMan ₃ FucGlcNAc ₂	LHFHDCFVNGCDASILLDN#TTSFR
15	4057	XylMan ₃ GlcNAc ₂	QLTPTFYDNSC(AAVESACPR)PN#VSNIVR- H ₂ O
16	4223	XylMan ₃ FucGlcNAc ₂	QLTPTFYDNSC(AAVESACPR)PN#VSNIVR
17	4720	Man ₃ FucGlcNAc ₂ ,	LYN#FSNTGLPDPTLN#TTYLQTLR

		Man3FucGlcNAc2	
18	4823	XylMan2FucGlcNAc2, XylMan2GlcNAc2	LYN#FSNTGLPDPTLN#TTYLQTLR
19	4854	Man3FucGlcNAc2, XylMan3FucGlcNAc2	LYN#FSNTGLPDPTLN#TTYLQTLR
20	4985	XylMan3FucGlcNAc2, XylMan3FucGlcNAc2	LYN#FSNTGLPDPTLN#TTYLQTLR
21	5068	Xyl Man3GlcNAc2	QLTPTFYDNSC(AAVESACPR)PN#VSNIVR

Table S2. The RSD of three parallel trials on the load capacity of Fe₃O₄@COF@MOF-PS.

Amount of material	m/z = 3672		m/z = 4223		m/z = 4985	
	Average ± S. D.	RSD (%)	Average ± S. D.	RSD (%)	Average ± S. D.	RSD (%)
50 µg	2169.7±142.6	6.6	1684.3 ±33.2	2.0	2650±118.3	4.5
75 µg	5934.7 ± 264.1	4.5	5368 ± 263.7	4.9	7193.3±73.4	1.0
100 µg	11130 ±513.9	4.6	6132.7±352.5	5.7	12436.7 ±303.7	2.4
150 µg	11008.7 ±250.7	2.3	6278.7±406.0	6.5	12466±476.5	3.8
200 µg	11180.7 ± 165.9	1.5	6116.3±252.0	4.1	12364.3±127.3	1.0

Table S3. The comparison table of Fe₃O₄@COF@MOF-PS and other previous materials in references.

No.	Materials used	LOD	Selectivity	Reusability	Standard protein	Ref.
1	Fe ₃ O ₄ @Au-GSH	10 fmol μL^{-1}	HRP: BSA = 1:100	5 cycles	HRP, IgG	[1]
2	Fe ₃ O ₄ @CS@Au-l-Cys	0.5 fmol μL^{-1}	HRP: BSA = 1:1000	5 cycles	HRP	[2]
3	magCDP@Ada-MSA	0.1 fmol μL^{-1}	HRP: BSA= 1:500	10 cycles	HRP	[3]
4	MUiO-66-NH ₂ /PA	1 fmol μL^{-1}	HRP: BSA = 1:1000	5 cycles	HRP, IgG	[4]
5	L-Cys-Fe ₃ O ₄ @mSiO ₂	1 fmol μL^{-1}	HRP: BSA = 1:100	5 cycles	HRP, IgG	[5]
6	Fe ₃ O ₄ @COF@MOF-PS	0.2 fmol μL^{-1}	HRP: BSA= 1:2000	10 cycles	HRP	this work

Table S4. Detail information of the N-glycopeptides enriched from the serum of healthy person and cervical cancer patient, using Fe₃O₄@COF@MOF-PS.

No.	Amino acid Sequence	Protein Accessions	Group MH ⁺ [Da]
N-glycopeptides detected in the serum of both healthy person and cervical cancer patient			
1	[K].TPLTAnITK.[S]	P0DOX2	959.54079
2	[R].LDVDQALnR.[S]	P04278	1044.53201
3	[R].AFGSNPnLTK.[V]	P22792	1049.5262
4	[K].ELLETVVnR.[T]	P55056	1073.58372
5	[R].GLnVTLSSSTGR.[N]	P0C0L4	1105.58478
6	[R].GLnVTLSSSTGR.[N]	P0C0L5	1105.58478
7	[R].EEQFnSTFR.[V]	P01859	1158.50619
8	[R].EEQFnSTYR.[V]	P01861	1174.50111
9	[R].EEQYnSTFR.[V]	P01860	1174.50111
10	[K].HAnWTLTPLK.[S]	P27169	1181.63133
11	[R].VELEDFNGnR.[T]	O75636	1193.54331
12	[R].VELEDFNGnR.[T]	O75636	1194.52732
13	[R].DIENFnSTQK.[F]	P43652	1196.54297
14	[R].EnISDPTSPLR.[T]	P01591	1229.60082
15	[K].ANQQLnFTEAK.[E]	Q9Y5Y7	1264.61681
16	[K].AAIPSALDTnSSK.[S]	Q08380	1275.64269
17	[K].YKNSDISSTR.[G]	P01871	1286.5859

18	[K].VSnVSCQASVSR.[M]	P55058	1294.60559
19	[K].IDSTGnVTNELR.[V]	O75882	1319.64375
20	[R].GGSSGWSGGLAQnR.[S]	P07357	1334.60837
21	[R].ALGFEnATQALGR.[A]	Q08380	1348.68555
22	[R].VYSGILnQSEIK.[E]	P03951	1351.71037
23	[K].DFYVDEnTTVR.[V]	P29622	1359.6063
24	[R].SWPAVGnCSSALR.[W]	P02790	1405.65287
25	[R].ITYSIVQTnCSK.[E]	P01042	1414.68826
26	[R].AGPnGTLFVADAYK.[G]	Q9HDC9	1424.70562
27	[K].LNAENnATFYFK.[I]	P01042	1432.67432
28	[K].LNAENnATFYFK.[I]	P01042	1433.65834
29	[K].NLFLnHSEnATAK.[D]	P00738	1459.71758
30	[K].NLFLnHSEnATAK.[D]	P00738	1460.7016
31	[K].NLFLnHSEnATAK.[D]	P00738	1461.68562
32	[K].GAFISnFSMTVDGK.[T]	P19823	1474.68826
33	[R].YAEDKFnETTEK.[S]	P43652	1475.65365
34	[K].CGLVPVLAENYnK.[S]	P02787	1477.73554
35	[K].YDFnSSMLYSTAK.[G]	P04114	1527.66719
36	[R].WFSAGLASnSSWLR.[E]	P41222	1582.76487
37	[R].LQNNENnISCVER.[G]	Q03591	1590.71766
38	[R].LQNNENnISCVER.[G]	Q03591	1591.70168
39	[K].FVEGSHnSTVSLTTK.[N]	P04114	1607.79114

40	[K].AGLQAFFQVQECnK.[S]	P00450	1640.77372
41	[K].HYTnSSQDVTVPCR.[V]	P0DOX2	1664.73331
42	[R].LAnLTQGEDQYYLR.[V]	P10909	1684.81769
43	[R].FnSSYLQGTNQITGR.[Y]	P04114	1686.80819
44	[R].FnSSYLQGTNQITGR.[Y]	P04114	1687.7922
45	[K].ALPQPQnVTSLLGCTH.[-]	P02790	1736.8636
46	[K].YTGnASALFILPDQDK.[M]	P01011	1753.86431
47	[K].YLGnATAIFFLPDEGK.[L]	P01009	1756.87923
48	[R].FSDGLESnSSTQFEVK.[K]	P0C0L4	1775.79702
49	[R].FSDGLESnSSTQFEVK.[K]	P0C0L5	1775.79702
50	[K].VVLHPnYSQVDIGLIK.[L]	P00738	1795.99526
51	[R].VNQNLVYESGSLnFSK.[L]	P04114	1799.88102
52	[K].LGACnDTLQQLMEVFK.[F]	P01008	1867.89285
53	[K].YNSQnQSNNQFVLYR.[I]	P01042	1875.86202
54	[K].LHINHnLTESVGPLPK.[S]	P51884	1883.99739
55	[K].EHEGAIYPDnTTDFQR.[A]	P00450	1893.82496
56	[R].FEVDSPVYnATWSASLK.[N]	P04114	1914.91199
57	[R].QDQCIYnTTYLNVQR.[E]	P02763	1916.8807
58	[K].SVVAPATDGGLnLTSTFLR.[K]	P41222	1920.00728
59	[K].SVQEIQATFFYFTPnK.[T]	P02763	1920.93781
60	[K].SVQEIQATFFYFTPnK.[T]	P19652	1920.93781
61	[R].QNQCFYnSSYLVNQR.[E]	P19652	1921.84974

62	[R].AV _n ITSENLIDDVVSLIR.[G]	P02748	1972.05971
63	[K].IYPGVDFGGEEL _n VTFVK.[G]	P03952	1984.99024
64	[R].VIDF _n CTTSSVSSALANTK.[D]	P04196	2015.95901
65	[K].ELHHLQE _{Qn} VSNAFLDK.[G]	P00450	2022.98794
66	[K].DIVEYY _n DS _n GSHVLQGR.[F]	P25311	2067.9254
67	[R].AYLLPAPPAPG _n ASESEEDR.[S]	P17936	2084.9771
68	[R].GFGVAIVG _n YTAALPTEAALR.[T]	Q96PD5	2092.10733
69	[R].VLS _n NSDANLELINTWVAK.[N]	P05155	2102.07642
70	[R].VLS _n NSDANLELINTWVAK.[N]	P05155	2103.06044
71	[K].TLYETEVFSTDFS _n ISAAK.[Q]	P05543	2124.00192
72	[K].EnLTAPGSDSAVFFEQTTR.[I]	P00450	2127.98292
73	[K].VS _n QTL _{SL} FFT _{VL} QDVPVR.[D]	P01023	2164.16485
74	[K].SLTF _n ETYQDISELVYGAK.[L]	P01008	2179.04412
75	[K].DVQIIVFPEDGIHGF _n FTR.[T]	P43251	2205.09749
76	[R].ADGTVNQIEGEATPV _n LTEPAK.[L]	P05090	2255.10376
77	[R].ADGTVNQIEGEATPV _n LTEPAK.[L]	P05090	2256.08778
78	[K].VGQLQLSH _n LSLVILVPQNLK.[H]	P05155	2314.34929
79	[K].VTQVYAE _n GTVLQGSTVASVYK.[G]	P27169	2315.17653
80	[K].LYLGSN _n L _{TAL} HPALFQ _n LSK.[L]	P22792	2316.22342
81	[R].SQILEGLGF _n LTELSESDVHR.[G]	P29622	2345.16195
82	[K].AALAAFNAQN _n GSNFQLEEISR.[A]	P02765	2366.13713
83	[K].AALAAFNAQN _n GSNFQLEEISR.[A]	P02765	2367.12114

84	[K].NnATVHEQVGGPSLTSDLQAQSK.[G]	P04004	2382.15317
85	[K].FnLTETSEAEIHQSFQHLLR.[T]	P01011	2401.17826
86	[K].VTQnLTLIEESLTSEFIHDIDR.[E]	P36955	2574.29335
87	[K].AFEnVTDLQWLILDHNLENSK.[I]	P51884	2613.31951
88	[K].MVSHHnLTTGATLINEQWLLTTAK.[N]	P00738	2680.37631
89	[R].NPNNDQVFPnGTLAPSIPIWGGSWR.[A]	Q9Y6R7	2738.33214
90	[R].NPNNDQVFPnGTLAPSIPIWGGSWR.[A]	Q9Y6R7	2738.33214
91	[R].NPNNDQVFPnGTLAPSIPIWGGSWR.[A]	Q9Y6R7	2738.33214
92	[K].LPTQnITFQTESSVAEQEAEFQSPK.[Y]	Q14624	2810.33667
93	[K].SVQEIQATFFYFTPnKTEDTIFLR.[E]	P02763	2896.44035
94	[K].SVQEIQATFFYFTPnKTEDTIFLR.[E]	P19652	2896.44035
95	[K].ELHHLQEQnVSNAFLDKGEFYIGSK.[Y]	P00450	2904.41626
96	[R].LSLHRPALEDLLLGSEAnLTCTLTGLR.[D]	P01876	2964.58228
97	[R].LSLHRPALEDLLLGSEAnLTCTLTGLR.[D]	P0DOX2	2964.58228
98	[R].QLAHQSnSTNIFFSPVSIATAFAMLSLGTK.[A]	P01009	3182.61906
99	[K].SLGNVnFTVSAEALESQELCGTEVPSVPEHGR.[K]	P01023	3414.6118
100	[K].SLGNVnFTVSAEALESQELCGTEVPSVPEHGR.[K]	P01023	3415.59582
101	[K].THTnISESHPhATFSAVGEASICEDDWNNGER.[F]	P01871	3520.48297
102	[K].ADTHDEILEGLNFnLTEIPEAQIHEGFQELLR.[T]	P01009	3692.80786

N-glycopeptides detected all in three parallel experiments of the serum of healthy people

1	[K].IGEADFnR.[S]	P04275	922.42649
2	[R].VQPFnVTQGK.[Y]	P13473	1118.58405

3	[K].WSDIW _n ATK.[Y]	P06276	1121.5262
4	[R].GLCV _n ASAVSR.[L]	P17936	1134.55718
5	[R].CFLG _n GTGYR.[G]	Q04756	1145.50442
6	[K].EVFVHP _n YSK.[S]	P04070	1220.59461
7	[R].DAGVVCT _n ETR.[S]	Q08380	1222.53684
8	[K].LG _n WSAMPSCK.[A]	P02749	1251.54966
9	[K].LG _n WSAMPSCK.[A]	P02749	1267.54457
10	[K].GV _n VCQETCTK.[M]	P03952	1296.55586
11	[K].FLN _n GTCTAEGK.[F]	P05156	1312.58379
12	[K].FLN _n GTCTAEGK.[F]	P05156	1313.56781
13	[R].LF _n VTPQDEQK.[F]	O75144	1319.64777
14	[R].nLTSLTESVDR.[N]	P80108	1336.65907
15	[K].SPDVInGSPISQK.[I]	P08603	1342.68489
16	[K].VV _n STTGPGEHLR.[N]	P07996	1367.69137
17	[R].D _n YTDLVAIQNK.[A]	P14151	1394.6798
18	[K].VPG _n VTAVLGETLK.[V]	P01833	1398.78387
19	[K].FL _n DTMAVYEAK.[L]	P29622	1402.65589
20	[K].GL _n LTEDTYKPR.[I]	Q08380	1407.71144
21	[R].GTAnTTTAGVPCQR.[W]	P26927	1434.66417
22	[R].IYSGIL _n LSDITK.[D]	P03952	1437.78354
23	[K].NLFL _n HSENATAK.[D]	P00739	1459.71758
24	[K].NLFL _n HSEnATAK.[D]	P00739	1460.7016

25	[K].NLFL _n HSE _n ATAK.[D]	P00739	1461.68562
26	[R].VYKPSAG _n NSLYR.[D]	P02749	1469.73832
27	[R].VYKPSAG _n NSLYR.[D]	P02749	1470.72233
28	[R]. _n HSCSEGQISIFR.[Y]	O75882	1535.69072
29	[R].AQLLQGLGF _n LTER.[S]	P08185	1560.83803
30	[R].ISE _n ETTCYMGK.[W]	P08603	1562.6349
31	[R].EVYPWY _n LTVEAK.[E]	P33151	1612.78935
32	[R].LNPTVTY _{Gn} DSFSAK.[A]	P05362	1614.76459
33	[R]. _n CCNTENPPGCYR.[Y]	P43652	1642.60429
34	[K]. _n TTCQDLQIEVTVK.[G]	P0C0L4	1649.80508
35	[K]. _n TTCQDLQIEVTVK.[G]	P0C0L5	1649.80508
36	[K].FNPGAESVVL _{Sn} STLK.[F]	Q13201	1663.85374
37	[K].LCMGSGL _n LCEPNK.[E]	P02787	1706.76587
38	[K]. _n GSGAVFPVAGADVQTLR.[E]	O00391	1759.89734
39	[K].VCQDCPLLAPL _n DTR.[V]	P02765	1772.83058
40	[K].SLPNFP _n TSATAnATGGR.[A]	Q6UXB8	1777.83513
41	[R].YLPV _n SSLLTSDCSER.[C]	Q9Y6R7	1841.85857
42	[K].LGAC _n DTLQQLMEVFK.[F]	P01008	1883.88776
43	[R].KVCQDCPLLAPL _n DTR.[V]	P02765	1900.92554
44	[K].W _n NTGCQALPSQDEGPSK.[A]	P01833	1989.86069
45	[R].VIDF _n CTTSSVSSALANTK.[D]	P04196	2016.94303
46	[K].IPCSQPPQIEHGTInSSR.[S]	P08603	2021.97091

47	[K].ISnSSDTVECECSENWK.[G]	O75882	2045.80628
48	[K].DIVEYYNDSnGSHVLQGR.[F]	P25311	2066.94139
49	[K].YGNPnETQnnSTSWPVFK.[S]	P06276	2085.90361
50	[K].NPVGLIGAEnATGETDPSHSK.[F]	P43251	2094.99382
51	[K].EGYSnISYIVVNHQGISSR.[L]	P49908	2124.03562
52	[K].nVSEDLPLPTFSPTLLGDSR.[M]	P11597	2159.08665
53	[R].VVGVPYQGnATALFILPSEGK.[M]	P05154	2161.15395
54	[K].LGSFEGLVnLTFIHLQHNR.[L]	P51884	2196.15601
55	[R].DQCIVDDITYNVnDTFHK.[R]	P02751-1	2197.97064
56	[K].LDAPTNLQFVnETDSTVLVR.[W]	P02751-1	2233.13467
57	[K].LQAPLnYTEFQKPICLPSK.[G]	P03952	2248.16822
58	[K].DFVnASSKYEITTIHNLFR.[K]	P05546	2256.12952
59	[R].LGSYPVGGnVSFECEDGFILR.[G]	P06681	2317.08052
60	[R].GLTFQQnASSMCVPDQDTAIR.[V]	P01871	2340.05947
61	[K].AATCINPLnGSVCERPAnHSAK.[Q]	O75882	2369.09725
62	[K].NnATVHEQVGGPSLTSDLQAQSK.[G]	P04004	2383.13719
63	[R].LSLLEEPGnGTFTVILNQLTSR.[D]	P01833	2403.27658
64	[R].QQQHLFGSnVTDCSGNFCLFR.[S]	P02787	2516.10815
65	[R].QQQHLFGSnVTDCSGnFCLFR.[S]	P02787	2517.09217
66	[K].GTGnDTVNLNVALLNVISNQEENIK.[H]	P26927	2587.30321
67	[R].LGHCPDPVLVNGEFSSSGPVnVSDK.[I]	P20851	2612.22971
68	[R].LGHCPDPVLVNGEFSSSGPVnVSDK.[I]	P20851	2613.21372

69	[K].MVSHH _n LTGATLINEQWLLTTAK.[N]	P00739	2680.37631
70	[K].LGAC _n DTLQQLMEVFKFDITISEK.[T]	P01008	2688.28953
71	[R].YPHKPE _n STTHPGADLQENFCR.[N]	P00734	2712.24709
72	[R].ADGTVNQIEGEATPV _n LTEPAKLEVK.[F]	P05090	2724.3938
73	[R].LEPVHLQLQCMSQEQLAQVAA _n ATK.[E]	Q96PD5	2808.40187
74	[K].ELHHLQE _n VSNAFLDKGEFYIGSK.[Y]	P00450	2905.40028
75	[K].NCGV _n CSGDVFTALIGEIASPNYPKPYPENSR.[C]	P09871	3527.62059
76	[K].QVFPGLNYCTSGAYS _n ASSTDSASYYP _L LTGDTR.[L]	P04114	3551.55435
77	[R].FVQAICEGDDCQPPAYTYN _n ITCASPEVVGLDLR.[D]	P35858	3970.79322
78	[R].FVQAICEGDDCQPPAYTYN _n ITCASPEVVGLDLR.[D]	P35858	3971.77723

N-glycopeptides detected all in three parallel experiments of the serum of cervical cancer patient

1	[R].TL _n QSSDELQLSMGNAMFVK.[E]	P01011	2214.0417
2	[K].APDKNVIFSPLSISTALAFSLGAH _n TTLTEILK.[G]	P01011	3583.96218
3	[K].NVIFSPLSISTALAFSLGAH _n TTLTEILK.[G]	P01011	3172.75039
4	[K].YK _n NSDISSTR.[G]	P01871	1285.60188
5	[K].VDKDLQSLEDILHQVEnK.[T]	P02679	2124.0819
6	[K].DLQSLEDILHQVEnK.[T]	P02679	1781.89158
7	[R].KLPPGLLA _n FTLLR.[T]	P02750	1553.94138

8	[R].DQCIVDDITYNVnDTFHK.[R]	P02751	2197.97064
9	[K].LDAPTNLQFVnETDSTVLVR.[W]	P02751	2233.13467
10	[K].WFYIASAFRNEEYnK.[S]	P02763	1939.88611
11	[K].AVLQLNEEGVDTAGSTGVTLnLTSKPILR.[F]	P08185	3110.69433
12	[K].AVLQLNEEGVDTAGSTGVTLnLTSKPILR.[F]	P08185	3111.67835
13	[R].GLnVTLSSTGRNGFK.[S]	P0C0L4	1552.79656
14	[R].GLnVTLSSTGRNGFK.[S]	P0C0L5	1552.79656
15	[R].EEQYnSTYR.[V]	P0DOX5	1190.49602
16	[R].EEQYnSTYRVVSVLTVLHQDWLNGK.[E]	P0DOX5	2979.48468
17	[K].INNDFNIEFYnSTWSYVK.[H]	P10643	2305.0084
18	[K].IGGIWTWVGThK.[S]	P14151	1332.69466
19	[K].WFYIASAFRNEEYnK.[S]	P19652	1939.88611
20	[K].DIVEYYnDSNGSHVLQGR.[F]	P25311	2066.94139
21	[R].FGCEIENnR.[S]	P25311	1139.4786
22	[R].VYLQGLIDCYLFGnSSTVLEDSK.[S]	P35542	2622.26436
23	[R].YQFNTNVVFSNnGTLVDR.[Y]	P43251	2088.99851
24	[K].LNVEAAAnWTVR.[G]	P80108	1273.65353
25	[R].VLnASAEAR.[A]	Q8NI99	1059.54291
26	[R].nKTEDLEATSEHFK.[T]	Q9BV40	1649.76532

N-glycopeptides detected in the serum of healthy person (run 1)

1	[K].TWnQSIAR.[L]	P12259	1089.56873
2	[R].WEYCnLTR.[C]	Q16609	1142.49352

3	[K].CInQSICEK.[C]	O75882	1152.50237
4	[K].LTQGICLEQnK.[T]	P28906	1304.65148
5	[K].LQnLTLPTnASIK.[F]	Q13201	1414.77879
6	[K].LLDLSGNnLTHLPK.[G]	P40197	1535.84278
7	[R].GLnVTLSSSTGRNGFK.[S]	P0C0L4	1552.79656
8	[R].GLnVTLSSSTGRNGFK.[S]	P0C0L5	1552.79656
9	[R].DSVSVVLGQHFFnR.[T]	Q04756	1605.80198
10	[K].QVHFFVnASDVDNVK.[A]	Q96IY4	1719.83368
11	[K].YYQEnFCEQICK.[Q]	P13671	1768.73053
12	[K].WFYIASAFRNEEYnK.[S]	P02763	1939.88611
13	[K].WFYIASAFRNEEYnK.[S]	P19652	1939.88611
14	[K].ELHHLQEQnVSNAFLDK.[G]	P00450	2023.97196
15	[K].VASVININPnTTHSTGSCR.[S]	P13473	2028.97673
16	[R].SEGSSVnLSPPLEQCVDPDR.[G]	P00734	2071.96007
17	[K].LETTVnYTDSQRPICLPSK.[G]	P03951	2223.09617
18	[K].LYLGSNnLTALHPALFQnLSK.[L]	P22792	2317.20744
19	[R].GLTFQQnASSMCVPDQDPAIR.[V]	P0DOX6	2340.05947
20	[R].GLTFQQnASSMCVPDQDPAIR.[V]	P01871	2356.05439
21	[R].GLTFQQnASSMCVPDQDPAIR.[V]	P0DOX6	2356.05439
22	[R].GLQPTLTNPGECPnFTCACR.[K]	P04275	2450.10096
23	[R].ESVTDHVNLTITPLEKPLQnFTLCFR.[A]	P02743	2972.51862
24	[R].QLAHQSnSTNIFFSPVSIATAFAMLSLGTK.[A]	P01009	3199.59799

25	[R].FSL LGHASISCTVEnETIGVWRPSPPTCEK.[I]	P04003	3373.61914
26	[K].THTnISESHPhnATFSAVGEASICEDDDWSGER.[F]	P0DOX6	3521.46699
27	[K].NCGVnCSGDVFTALIGEIASPNYPKPYPENSr.[C]	P09871	3528.60461
28	[K].YLGnATAIFFLPDEGKLQHLENELTHDIITK.[F]	P01009	3541.82133
29	[K].QVFPGLnYCTSGAYSnASSTDSASYPLTGDTR.[L]	P04114	3552.53836
30	[R].LSVDKDQYVEPEnVTIQCDSGYGvVGPQSITCSGnR.[T]	P04003	3973.80662
31	[R].NnLTTYK.[S]	P48740	854.42542
32	[K].EDALnETR.[E]	P10909	948.42688
33	[K].LCDnLSTK.[N]	P02774	951.44517
34	[K].HLnGTITAK.[Y]	Q6YHK3	955.52072
35	[K].GINYnSSVAK.[S]	P03951	1053.52112
36	[R].nECFLQHK.[D]	P02768	1075.49894
37	[R].nECFLQHK.[D]	P02768	1076.48296
38	[K].WVSnKTEGR.[I]	P01008	1077.53235
39	[R].FnDTEVLQR.[L]	P43251	1122.54258
40	[K].SYnVTSVLFR.[K]	P80188	1186.61026
41	[R].EEQYnSTYR.[V]	P0DOX5	1190.49602
42	[R].DIENFnSTQK.[F]	P43652	1197.52699
43	[R].IIPSnNSGTFR.[I]	O00533	1206.61133
44	[K].YKnNSDISSTR.[G]	P01871	1285.60188

45	[K].GVnVCQETCTK.[M]	P03952	1295.57185
46	[R].AFQYDTnCSFR.[C]	P16109	1409.57904
47	[R].FQLLnFSSSELK.[V]	Q9BY67	1413.72602
48	[K].MDGASnVTCINSR.[W]	P08603	1425.60969
49	[K].NLFLNHSEnATAK.[D]	P00738	1459.71758
50	[K].NLFLNHSEnATAK.[D]	P00739	1459.71758
51	[K].NAHGEEKE nLTAR.[A]	Q06033	1469.69791
52	[R].TnSTFVQALVEHVK.[E]	P07602	1573.82205
53	[R].VNQNLVYESGSLnFSK.[L]	P04114	1800.86504
54	[R].VFHIHnESWVLLTPK.[A]	O75882	1820.96938
55	[R].nGTGHGnSTHHGPEYMR.[C]	P02790	1853.76198
56	[K].LGACnDTLQQLMEVFK.[F]	P01008	1866.90883
57	[R].nGTGHGnSTHHGPEYMR.[C]	P02790	1869.7569
58	[R].QDQCIYnTTYLVNQR.[E]	P02763	1917.86472
59	[R].QNQCFYnSSYLVNQR.[E]	P19652	1922.83375
60	[K].nLTDFAEQYSIQDWAK.[R]	P04114	1929.8865
61	[K].DFEDLYTPVnGSIVIVR.[A]	P02786	1937.98548
62	[R].VIDFnCTTSSVSSALANTK.[D]	P04196	2014.975
63	[K].ELYEPIWQnFTDPQLR.[R]	P12821	2049.99163
64	[K].VDYESQSTDTQnFSSESK.[R]	P17936	2052.85163
65	[K].YGNPnETQnNSTSWPVFK.[S]	P06276	2084.91959
66	[K].EHETCLAPELYNGnYSTTQK.[T]	P05160	2356.03978

67	[R].IVGGT _n SSWGEWPWQVSLQVK.[L]	P03952	2359.17172
68	[K].STGKPTLY _n VSLVMSDTAGTCY.[-]	P01871	2366.08904
69	[K].STGKPTLY _n VSLVMSDTAGTCY.[-]	P0DOX6	2366.08904
70	[R].EQECEIISFAETGLSTInQTR.[L]	P55103	2427.13441
71	[K].ALGISPFHEHAENVFTAnDSGPR.[R]	P02766	2452.18916
72	[R].QQQHLLFGSNVTDCSG _n FCLFR.[S]	P02787	2516.10815
73	[K].AFEnVTDLQWLILDHNLLNSK.[I]	P51884	2614.30352
74	[K].nYSPYYNTIDDLKDQIVDLTVGNK.[T]	P35527	2903.39452
75	[R].NPPMGGNVVIFDTVITNQEEPQ _n HSGR.[F]	P02745	3115.44255
76	[K].nLSRTPSSCSSSLDSIKADGTSLDFSTYR.[S]	Q8NG31	3153.46408
77	[R].QLAHQS _n STNIFFSPVSIATAFAMLSLGTK.[A]	P01009	3183.60308
78	[R].GPGTSSVST _n ASPSEGAPLAGSYGCTPHSFPK.[F]	Q659C4	3193.43786
79	[R].TAGWNVPIGTLRPFL _n WTGPPEPIEAAVAR.[F]	P02788	3231.69494
80	[K].DQYVEPE _n VTIQCDSGYGVVGPQSITCSG _n R.[T]	P04003	3431.5002
N-glycopeptides detected in the serum of healthy person (run 2)			
1	[K].TW _n QSIALR.[L]	P12259	1089.56873
2	[R].WEYC _n LTR.[C]	Q16609	1142.49352
3	[K].CI _n QSICEK.[C]	O75882	1152.50237
4	[K].LTQGICLEQ _n K.[T]	P28906	1304.65148
5	[K].LQ _n LTLPT _n ASIK.[F]	Q13201	1414.77879
6	[K].LLDLSGN _n LTHLPK.[G]	P40197	1535.84278
7	[R].GL _n VTLSSSTGRNGFK.[S]	P0C0L4	1552.79656

8	[R].GLnVTLSSSTGRNGFK.[S]	P0C0L5	1552.79656
9	[R].DSVSVVLGQHFFnR.[T]	Q04756	1605.80198
10	[K].QVHFFVnASDVDNVK.[A]	Q96IY4	1719.83368
11	[K].YYQEnFCEQICKS.[Q]	P13671	1768.73053
12	[K].WFYIASAFRNEEYnK.[S]	P02763	1939.88611
13	[K].WFYIASAFRNEEYnK.[S]	P19652	1939.88611
14	[K].ELHHLQEQnVSNAFLDK.[G]	P00450	2023.97196
15	[K].VASVININPnTTHSTGSCR.[S]	P13473	2028.97673
16	[R].SEGSSVnLSPPLEQCVPDR.[G]	P00734	2071.96007
17	[K].LETTVnYTDSQRPICLPSK.[G]	P03951	2223.09617
18	[K].LYLGSNnLTALHPALFQnLSK.[L]	P22792	2317.20744
19	[R].GLTFQQnASSMCVPDQDPAIR.[V]	P0DOX6	2340.05947
20	[R].GLTFQQnASSMCVPDQDPAIR.[V]	P01871	2356.05439
21	[R].GLTFQQnASSMCVPDQDPAIR.[V]	P0DOX6	2356.05439
22	[R].GLQPTLTNPGECPnFTCACR.[K]	P04275	2450.10096
23	[R].ESVTDHVNLTITPLEKPLQnFTLCFR.[A]	P02743	2972.51862
24	[R].QLAHQSnSTNIFFSPVSIATAFAMLSLGTK.[A]	P01009	3199.59799
25	[R].FSLLGHASISCTVEEnETIGVWRPSPPTCEK.[I]	P04003	3373.61914
26	[K].THTnISESHpNATFSAVGEASICEDDDWSGER.[F]	P0DOX6	3521.46699
27	[K].NCGVnCSGDVFTALIGEIASPNYPKPYPENS.[C]	P09871	3528.60461
28	[K].YLGnATAIFFLPDEGKLQHLENELTHDIITK.[F]	P01009	3541.82133
29	[K].QVFPGLnYCTSGAYSnASSTDSASYYPPLTGDTR.[	P04114	3552.53836

	L]		
30	[R].LSVDKDQYVEPE _n VTIQCDSGYGVVGPPQSITCSG	P04003	3973.80662
	nR.[T]		
31	[K].APGWAnSSAGSGR.[I]	Q86VB7	1218.54979
32	[K].nFTENDLLVR.[I]	P00734	1221.61099
33	[R].FGYILHTD _n R.[T]	P48740	1236.60076
34	[R].LHEIT _n ETFR.[G]	Q6EMK4	1260.62189
35	[R].HPFTGD _n CTIK.[L]	Q13201	1290.57831
36	[K].EWD _n TTTECR.[L]	P20851	1312.51102
37	[K].IGGIWTWVG _{Tn} K.[S]	P14151	1332.69466
38	[K].KANQQL _n FTEAK.[E]	Q9Y5Y7	1392.71177
39	[K].MDGAS _n VTICNSR.[W]	P08603	1441.6046
40	[K].CGLVPVLAENY _n K.[S]	P02787	1478.71956
41	[R].AEPPL _n ASASDQGEK.[V]	Q9Y4L1	1514.69691
42	[R].nHSCEPCQTLAVR.[S]	P00748	1572.68934
43	[K].VTACHSSQP _n ATLYK.[M]	P05543	1677.7901
44	[K].QEPER _n ECFLQHK.[D]	P02768	1715.78059
45	[R].R _n HSCEPCQTLAVR.[S]	P00748	1728.79045
46	[K].FVGTPEV _n QTTLYQR.[Y]	P01033	1753.87554
47	[K].AAPAPQEATATF _n STADR.[E]	P13598	1819.8457
48	[R].Q _n QCFY _n SSYLN _V QR.[E]	P19652	1922.83375
49	[K].WFYIASAFRNEEY _n K.[S]	P02763	1938.90209

50	[K].WFYIASAFRNEEYnK.[S]	P19652	1938.90209
51	[K].TIHDLHLFIENIDFnK.[S]	P04114	1970.0018
52	[K].VASVININPnTTHSTGSCR.[S]	P13473	2029.96074
53	[K].NPVGLIGAEnATGETDPSHSK.[F]	P43251	2095.97783
54	[R].TLnQSSDELQLSMGNAMFVK.[E]	P01011	2214.0417
55	[K].QVLFLDTVYGnCSTHFTVK.[T]	P04114	2230.08488
56	[K].TVLTPATNHMGnVTFTIPANR.[E]	P01024	2256.14413
57	[K].INNDFNIEFYnSTWSYVK.[H]	P10643	2305.0084
58	[K].AALAAFNAQNnGSNFQLEEISR.[A]	P02765	2368.10516
59	[K].FnTTYINIGSSYPPEHGYFR.[A]	Q9H8L6	2414.10879
60	[R].GLQPTLTNPGECPnFTCACR.[K]	P04275	2451.08498
61	[R].KEHETCLAPELYNGnYSTTQK.[T]	P05160	2484.13474
62	[R].KEHETCLAPELYNGnYSTTQK.[T]	P05160	2485.11876
63	[K].GCSSSTSVLLTLDNNVVnGSSPAIR.[T]	P07996	2549.25117
64	[R].VYLQGLIDCYLFGnSSTVLEDSK.[S]	P35542	2622.26436
65	[K].MVSHHnLTTGATLINEQWLLTTAK.[N]	P00738	2696.37123
66	[K].MVSHHnLTTGATLINEQWLLTTAK.[N]	P00739	2696.37123
67	[K].MVSHHnLTTGATLINEQWLLTTAK.[N]	P00738	2697.35524
68	[K].MVSHHnLTTGATLINEQWLLTTAK.[N]	P00739	2697.35524
69	[K].LGACnDTLQQLMEVFKFDTISEK.[T]	P01008	2704.28445
70	[R].ADGTVNQIEGEATPVnLTEPAKLEVK.[F]	P05090	2725.37781
71	[R].QVQSLTCEVDALKGTnESLERQMR.[E]	P08670	2809.34548

72	[R].ESVTDHVNLIPTLEKPLQnFTLCFR.[A]	P02743	2973.50263
73	[R].VLSAMINSNDDNGVLAGnWSGTYTGGRDPR.[S]	Q08188	3154.44943
74	[K].LRNTEASSEEESASRMQVEQnLSDHIK.[L]	Q9H3R0	3193.45497
75	[R].QLAHQSnSTNIFFSPVSIATAFAMLSLGTK.[A]	P01009	3198.61398
76	[R].GGNSNGALCHFPFLYNNHnYTDCTSEGR.[R]	P02751-1	3203.33302
77	[K].GAVGVSFMFnGTSFGFVNCHLTSGNEKTAR.[R]	O15357	3210.46191
78	[R].IHMTSEKHMHNMMLLQnMTQIQHNR.[H]	Q15911	3250.46827
79	[K].SLGNVnFTVSAEALESQELCGTEVPSVPEHGR.[K]	P01023	3413.62779
80	[K].NSVLnSSTAETHSSPYSEDPIEDPLQPDVTGIR.[L]	P12259	3455.60849
81	[R].LSVDKDQYVEPEnVTIQCDSGYGVVGPQSITCSG nR.[T]	P04003	3972.8226
82	[K].ITPNLAEFASFSLYRQLAHQSnSTNIFFSPVSIATAF AMLSLGTK.[A]	P01009	4805.46474

N-glycopeptides detected in the serum of healthy person (run 3)

1	[K].DnNSIITR.[K]	P06276	933.4636
2	[K].EDALnETR.[E]	P10909	948.42688
3	[R].nASLSAAGTR.[V]	Q13477	948.4745
4	[K].HLnGTITAK.[Y]	Q6YHK3	955.52072
5	[K].GINYnSSVAK.[S]	P03951	1053.52112
6	[R].nECFLQHK.[D]	P02768	1075.49894
7	[K].WVSnKTEGR.[I]	P01008	1077.53235
8	[R].FGCEIENnR.[S]	P25311	1139.4786

9	[R].FGCEIENnR.[S]	P25311	1140.46261
10	[K].CGnCSLTTLK.[D]	P49908	1154.51802
11	[R].EEQYnSTYR.[V]	P0DOX5	1190.49602
12	[K].nFTENDLLVR.[I]	P00734	1221.61099
13	[R].FGYILHTDnR.[T]	P48740	1236.60076
14	[K].YKnNSDISSTR.[G]	P01871	1285.60188
15	[K].GVnVCQETCTK.[M]	P03952	1295.57185
16	[K].EWDnTTTECR.[L]	P20851	1312.51102
17	[K].IGGIWTWVGThK.[S]	P14151	1332.69466
18	[R].FQLLnFSSSELK.[V]	Q9BY67	1413.72602
19	[K].MDGASnVTCINSR.[W]	P08603	1425.60969
20	[K].LPPGLLnFTLLR.[T]	P02750	1425.84641
21	[K].MDGASnVTCINSR.[W]	P08603	1441.6046
22	[K].CGLVPVLAENYnK.[S]	P02787	1478.71956
23	[K].TQAALSnLTCCIDR.[S]	Q13201	1623.74652
24	[R].nTSISTAYMELSSLR.[S]	P0DP01	1673.80508
25	[K].FVGTPEVnQTTLYQR.[Y]	P01033	1753.87554
26	[K].AAPAPQEATATFnSTADR.[E]	P13598	1819.8457
27	[R].nGTGHGnSTHHGPEYMR.[C]	P02790	1853.76198
28	[K].LGACnDTLQQLMEVFK.[F]	P01008	1866.90883
29	[K].YNSQnQSNNQFVLYR.[I]	P01042	1876.84603
30	[R].QnQCFYnSSYLVNQR.[E]	P19652	1922.83375

31	[K].DFEDLYTPV _n GSIVIVR.[A]	P02786	1937.98548
32	[R].VVAEGFDFANGInISPDGK.[Y]	P27169	1950.94435
33	[K].TIHDLHLFIENIDF _n K.[S]	P04114	1970.0018
34	[K].YGNP _n ETQ _n NSTSWPVFK.[S]	P06276	2084.91959
35	[R].YQFNTNVVFSN _n GTLVDR.[Y]	P43251	2088.99851
36	[R].TL _n QSSDELQLSMGNAMFVK.[E]	P01011	2214.0417
37	[K].TVLTPATNHMG _n VTFTIPANR.[E]	P01024	2256.14413
38	[K].INNDFNIEFY _n STWSYVK.[H]	P10643	2305.0084
39	[K].INNDFNIEFY _n STWSYVK.[H]	P10643	2305.99242
40	[K].VGQLQLSH _n LSLVILVPQNLK.[H]	P05155	2315.33331
41	[R].YKVDYESQSTDTQ _n FSSESK.[R]	P17936	2344.00992
42	[R].IVGGT _n SSWGEWPWQVSLQVK.[L]	P03952	2359.17172
43	[K].ML _n TSSLLEQLNEQFNWVSR.[L]	P10909	2410.17074
44	[K].FnTTYINIGSSYFPEHGYFR.[A]	Q9H8L6	2414.10879
45	[K].FnTTYINIGSSYFPEHGYFR.[A]	Q9H8L6	2415.0928
46	[R].EQECEIISFAETGLSTInQTR.[L]	P55103	2427.13441
47	[K].ALGISPFHEHAENVVFTAnDSGPR.[R]	P02766	2452.18916
48	[K].GCSSSTSVLLTLDNNVV _n GSSPAIR.[T]	P07996	2549.25117
49	[R].VYLQGLIDCYLFG _n SSTVLEDSK.[S]	P35542	2622.26436
50	[K].MVSHH _n LTTGATLINEQWLLTTAK.[N]	P00738	2696.37123
51	[K].MVSHH _n LTTGATLINEQWLLTTAK.[N]	P00739	2696.37123
52	[K].LGAC _n DTLQQLMEVFKFDTISEK.[T]	P01008	2704.28445

53	[R].nLSSLESVQLDHNQLETLPDGVFGALPR.[L]	P40197	3050.54292
54	[R].NPPMGGNVVIFDTVITNQEEPYNHSGR.[F]	P02745	3114.45854
55	[R].GPGTSSVSTSnASPSEGAPLAGSYGCTPHSFPK.[F]	Q659C4	3193.43786
56	[R].QLAHQSnSTNIFFSPVSIATAFAMLSLGTK.[A]	P01009	3198.61398
57	[K].DQYVEPEnVTIQCDSGYGVVGPQSITCSGnR.[T]	P04003	3431.5002
58	[K].ADTHDEILEGLNFnLTEIPEAQIHEGFQELLR.[T]	P01009	3693.79188

N-glycopeptides detected in the serum of cervical cancer patient (run 1)

1	[K].EDGGGWYnR.[C]	P02675	1240.50178
2	[K].VCQDCPLLAPLnDTR.[V]	P02765	1772.83058
3	[R].IYSGILnLSDITK.[D]	P03952	1437.78354
4	[K].YGNPnETQnnSTSWPVFK.[S]	P06276	2085.90361
5	[R].GLCVnASAVSR.[L]	P17936	1134.55718
6	[R].QnQCFYnSSYLNVQR.[E]	P19652	1922.83375
7	[K].FLnDTMAVYEAK.[L]	P29622	1402.65589
8	[R].EVYPWYnLTVEAK.[E]	P33151	1612.78935
9	[K].SLPNFPnTSATAnATGGR.[A]	Q6UXB8	1777.83513
10	[K].ELHHLQEQnVSNAFLDKGEFYIGSK.[Y]	P00450	2905.40028
11	[K].MVSHHnLTTGATLINEQWLLTTAK.[N]	P00738	2696.37123
12	[K].MVSHHnLTTGATLINEQWLLTTAK.[N]	P00739	2680.37631
13	[K].MVSHHnLTTGATLINEQWLLTTAK.[N]	P00739	2696.37123
14	[K].NLFLnHSEnATAK.[D]	P00739	1459.71758
15	[K].NLFLnHSEnATAK.[D]	P00739	1460.7016

16	[K].NLFL _n HSE _n ATAK.[D]	P00739	1461.68562
17	[K].ADTHDEILEGLN _F _n LTEIPEAQIHEGFQELLR.[T]	P01009	3693.79188
18	[K].SLGNV _n FTVSAEALESQELCGTEVPSVPEHGR.[K]	P01023	3413.62779
19	[K].TVLTPATNHMG _n VTFTIPANR.[E]	P01024	2256.14413
20	[K].STGKPTLY _n VSLVMSD _n TAGTCY.[-]	P01871	2366.08904
21	[R].GTAGNALMDGASQLMGE _n R.[T]	P02675	1893.84294
22	[R].FSYSK _n ET _n YQLFLSYSSK.[K]	P02748	2193.03864
23	[K]. _n ET _n YQLFLSYSSK.[K]	P02748	1580.74788
24	[K].LDAPTNLQFV _n ETDSTVLVR.[W]	P02751	2234.11868
25	[R].QDQCIY _n TTYLN _n VQR.[E]	P02763	1917.86472
26	[K].AALAAFNAQN _n GSNFQLEEISR.[A]	P02765	2368.10516
27	[K].DFEDLYTPV _n GSIVIVR.[A]	P02786	1937.98548
28	[R].IVGGT _n SSWGEWPWQVSLQVK.[L]	P03952	2359.17172
29	[K].LQAPL _n YTEFQKPICLPSK.[G]	P03952	2248.16822
30	[K].N _n ATVHEQVGGPSLTSDLQAQSK.[G]	P04004	2383.13719
31	[K].QVLFLDTVY _G _n CSTHFTVK.[T]	P04114	2230.08488
32	[R].VNQNLVYESGSL _n FSK.[L]	P04114	1800.86504
33	[K].YDF _n SSMLYSTAK.[G]	P04114	1543.6621
34	[K].QVFPGL _n YCTSGAYS _n ASSTDSASYYP _n LTGDTR.[L]	P04114	3552.53836
35	[K].IGEADF _n R.[S]	P04275	922.42649
36	[R].ADGTVNQIEGEATPV _n LTEPAKLEVK.[F]	P05090	2724.3938

37	[K].FLNnGTCTAEGK.[F]	P05156	1313.56781
38	[K].DnNSIITR.[K]	P06276	933.4636
39	[K].YGNPnETQnNSTSWPVFK.[S]	P06276	2084.91959
40	[K].WSDIWnATK.[Y]	P06276	1121.5262
41	[K].nTTCQDLQIEVTVK.[G]	P0C0L4	1649.80508
42	[K].nTTCQDLQIEVTVK.[G]	P0C0L5	1649.80508
43	[R].EEQYnSTYRVVSVLTVLHQDWLNGK.[E]	P0DOX5	2980.46869
44	[K].nVSEDLPLPTFSPTLLGDSR.[M]	P11597	2159.08665
45	[R].DnYTDLVAIQNK.[A]	P14151	1394.6798
46	[K].LYLGSnLTALHPALFQnLSK.[L]	P22792	2317.20744
47	[K].GNKSSISGTEQEIFQVELNLQnPSLNHQGIDK.[I]	P26717	3526.72961
48	[K].NPVGLIGAEnATGETDPSHSK.[F]	P43251	2094.99382
49	[K].EGYSnISYIVVNHQGISSR.[L]	P49908	2124.03562
50	[K].LGSFEGLVnLTFIHLQHNR.[L]	P51884	2196.15601
51	[R].nLTSLTESVDR.[N]	P80108	1336.65907
52	[K].SYnVTSVLFR.[K]	P80188	1186.61026
53	[R].DSVSVVLGQHFFnR.[T]	Q04756	1605.80198
54	[K].GLnLTEDTYKPR.[I]	Q08380	1407.71144
55	[R].nGTLVAFR.[G]	Q92954	878.47304
56	[R].LYHFLLGAWSLnATELDPCPLSPELLGLTK.[E]	Q96PD5	3369.74393
57	[R].TGKnSCYENISELK.[Y]	Q9P2G4	1643.75813

N-glycopeptides detected in the serum of cervical cancer patient (run 2)

1	[K].EDGGGWYnR.[C]	P02675	1240.50178
2	[K].VCQDCPLLAPLnDTR.[V]	P02765	1772.83058
3	[R].IYSGILnLSDITK.[D]	P03952	1437.78354
4	[K].YGNPnETQnnSTSWPVFK.[S]	P06276	2085.90361
5	[R].GLCVnASAVSR.[L]	P17936	1134.55718
6	[R].QnQCFYnSSYLNQVR.[E]	P19652	1922.83375
7	[K].FLnDTMAVYEAK.[L]	P29622	1402.65589
8	[R].EVYPWYnLTVEAK.[E]	P33151	1612.78935
9	[K].SLPNFPnTSATAnATGGR.[A]	Q6UXB8	1777.83513
10	[K].nFTENDLLVR.[I]	P00734	1221.61099
11	[K].MVSHHnLTTGATLINEQWLLTTAK.[N]	P00738	2681.36033
12	[R].QLAHQSnSTNIFFSPVSIATAFAMLSLGTK.[A]	P01009	3183.60308
13	[R].QLAHQSnSTNIFFSPVSIATAFAMLSLGTK.[A]	P01009	3198.61398
14	[K].YNSQnQSNNQFVLYR.[I]	P01042	1876.84603
15	[K].VPGnVTAVLGETLK.[V]	P01833	1398.78387
16	[R].EEQFnSTFRVSVLTVVHQDWLNGK.[E]	P01859	2933.4792
17	[R].GTAGNALMDGASQLMGEEnR.[T]	P02675	1894.82695
18	[K].SSVITLNTNAELFnQSDIVAHLSSSSSVIDALQY K.[L]	P04114	3866.95458
19	[R].ADGTVNQIEGEATPVnLTEPAKLEVK.[F]	P05090	2725.37781
20	[R].EnETEIIK.[C]	P06276	976.48333
21	[R].AQLLQGLGFnLTER.[S]	P08185	1560.83803

22	[K].SPDVInGSPISQK.[I]	P08603	1342.68489
23	[R].EEQYnSTYRVVSVLTVLHQDWLNGKEYK.[C]	P0DOX5	3399.68556
24	[R].nTSISTAYMELSSLR.[S]	P0DP01	1673.80508
25	[K].MLnTSSLLEQLNEQFNWVSR.[L]	P10909	2410.17074
26	[K].TWnQSIALR.[L]	P12259	1089.56873
27	[K].AAPAPQEATATFnSTADR.[E]	P13598	1819.8457
28	[K].DIVEYYNDSnGSHVLQGR.[F]	P25311	2066.94139
29	[R].FnDTEVLQR.[L]	P43251	1122.54258

N-glycopeptides detected in the serum of cervical cancer patient (run 3)

1	[K].nFTENDLLVR.[I]	P00734	1221.61099
2	[K].MVSHHnLTTGATLINEQWLLTTAK.[N]	P00738	2696.37123
3	[K].MVSHHnLTTGATLINEQWLLTTAK.[N]	P00738	2697.35524
4	[K].MVSHHnLTTGATLINEQWLLTTAK.[N]	P00739	2680.37631
5	[K].MVSHHnLTTGATLINEQWLLTTAK.[N]	P00739	2696.37123
6	[K].MVSHHnLTTGATLINEQWLLTTAK.[N]	P00739	2697.35524
7	[K].NLFLnHSEnATAK.[D]	P00739	1459.71758
8	[K].NLFLnHSEnATAK.[D]	P00739	1460.7016
9	[K].NLFLnHSEnATAK.[D]	P00739	1461.68562
10	[K].YLGnATAIFFLPDEGKLQHLENELTHDIITK.[F]	P01009	3541.82133
11	[R].QLAHQSnSTNIFFSPVSIATAFAMLSLGTK.[A]	P01009	3198.61398
12	[R].QLAHQSnSTNIFFSPVSIATAFAMLSLGTK.[A]	P01009	3183.60308
13	[R].QLAHQSnSTNIFFSPVSIATAFAMLSLGTK.[A]	P01009	3199.59799

14	[K].ADTHDEILEGLNF _n LTEIPEAQIHEGFQELLR.[T]	P01009	3693.79188
15	[K].YNSQ _n QSNNQFVLYR.[I]	P01042	1876.84603
16	[R].LSLLEEPG _n GTFTVILNQLTSR.[D]	P01833	2403.27658
17	[K].VPG _n VTAVLGETLK.[V]	P01833	1398.78387
18	[K].STGKPTLY _n VSLVMSDTAGTCY.[-]	P01871	2366.08904
19	[R].FSYSK _n ETYQLFLSYSSK.[K]	P02748	2193.03864
20	[K]. _n ETYQLFLSYSSK.[K]	P02748	1580.74788
21	[R].VYKPSAG _n NSLYR.[D]	P02749	1469.73832
22	[R].VYKPSAG _n NSLYR.[D]	P02749	1470.72233
23	[K].LPPGLLA _n FTLLR.[T]	P02750	1425.84641
24	[K].LDAPTNLQFV _n ETDSTVLVR.[W]	P02751	2234.11868
25	[R].IVGGT _n SSWGEWPWQVSLQVK.[L]	P03952	2359.17172
26	[K].LQAPL _n YTEFQKPICLPSK.[G]	P03952	2248.16822
27	[K].N _n ATVHEQVGGPSLTSDLQAQSK.[G]	P04004	2383.13719
28	[K].IQSPLFTLDANADIG _n GTTSANEAGIAASITAK.[G]	P04114	3233.61721
29	[R].VNQNLVYESGSL _n FSK.[L]	P04114	1800.86504
30	[K].SSVITLNTNAELF _n QSDIVAHLSSSSSVIDALQY K.[L]	P04114	3866.95458
31	[K].QVFPGL _n YCTSGAYSNASSTDSASYYP LTGDTR.[L]	P04114	3551.55435
32	[R].ADGTVNQIEGEATPV _n LTEPAKLEVK.[F]	P05090	2724.3938
33	[K].VGQLQLSH _n LSLVILVPQNLK.[H]	P05155	2315.33331

34	[K].FLNnGTCTAEGK.[F]	P05156	1312.58379
35	[K].DFVnASSKYEITTIHNLFR.[K]	P05546	2256.12952
36	[R].EnETEIIK.[C]	P06276	976.48333
37	[K].DnNSIITR.[K]	P06276	933.4636
38	[K].WSDIWnATK.[Y]	P06276	1121.5262
39	[R].AQLLQGLGFnLTER.[S]	P08185	1560.83803
40	[K].nTTCQDLQIEVTVK.[G]	P0C0L4	1649.80508
41	[K].nTTCQDLQIEVTVK.[G]	P0C0L5	1649.80508
42	[K].MLnTSSLLEQLNEQFNWVSR.[L]	P10909	2410.17074
43	[K].MLnTSSLLEQLNEQFNWVSR.[L]	P10909	2426.16565
44	[R].DnYTDLVAIQNK.[A]	P14151	1394.6798
45	[R].YKVDYESQSTDTQnFSSESK.[R]	P17936	2344.00992
46	[K].DIVEYYNDSnGSHVLQGR.[F]	P25311	2066.94139
47	[R].FnDTEVLQR.[L]	P43251	1122.54258
48	[K].NPVGLIGAEEnATGETDPSHSK.[F]	P43251	2095.97783
49	[K].EGYSnISYIVVNHQGISSR.[L]	P49908	2124.03562
50	[K].LGSFEGLVnLTFIHLQHNR.[L]	P51884	2196.15601
51	[R].nLTSLTESVDR.[N]	P80108	1336.65907
52	[K].GLnLTEDTYKPR.[I]	Q08380	1407.71144
53	[R].IHMTSEKHMHNMMLLQQnMTQIQHNR.[H]	Q15911	3250.46827
54	[R].nGTLVAFR.[G]	Q92954	878.47304
55	[R].LYHFLLGAWSLnATELDPCPLSPELLGLTK.[E]	Q96PD5	3369.74393

n: N-glycosylation site.

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