

Table S3. Bioactive peptides present in bovine colostrum.

Parent proteins	Protein description	Peptides	Function
P02662	CSN1S1	EDVPSERY	Osteoanabolic
		VAPFPEVFGK	ACE-inhibitory
			Antioxidant
		HPIKHQGLPQEVLNEN	Antioxidant
		VPQLEIVPNS(+79.97)AEER , VPQLEIVPNSAEER	Promote calcium uptake
		IGSENSEKTTMP, IGSENSEKTTM(+15.99)P, IGS(+79.97)ENSEKTTM(+1 5.99)P	ACE-inhibitory
		GLPQEVLNENLL	Antioxidant
		GLPQEVLNENLLR	Antioxidant
		FVAPFPEVFGKEK	ACE-inhibitory
		YKVPQLEIVPNS(+79.97)A EER, YKVPQLEIVPNSAEER	Promote calcium uptake
		YVPLGTQYTDAPSFDIPN PIGSENSEKTTM(+15.99)P, YVPLGTQYTDAPSFDIPN PIGSENSEKTTMP, YVPLGTQYTDAPSFS(+79. 97)DIPNPIGSENSEKTTM(+ 15.99)P, YVPLGTQYTDAPSFDIPN PIGS(+79.97)ENSEKTTMP	ACE-inhibitory
		EDVPSER	Osteoanabolic
		VLNENLLRF	Antimicrobial
		HQGLPQEVLNENLL	Antioxidant
		LNENLLRF	Antimicrobial
		VPQLEIVPNS(+79.97)AEER LHS, VPQLEIVPNSAEERLHS	Promote calcium uptake
		NENLLRF	ACE-inhibitory
		HQGLPQEVLNEN	Antioxidant
		YKVPQLEIVPNS(+79.97)A EERLHSM, YKVPQLEIVPNSAEERLHS M(+15.99), YKVPQLEIVPNS(+79.97)A EERLHSM(+15.99), YKVPQLEIVPNSAEERLHS	Promote calcium uptake

	M	
	APFPEVFGKE	ACE-inhibitory
		Antioxidant
	KHPIKHQGLPQEVLNENL L	Antimicrobial Immunomodulatory
	VAPFPEVFGKE	ACE-inhibitory Antioxidant
	RPKHPPIKHQGLPQEVLNE N	Antimicrobial Immunomodulatory
	PFPEVFGKEKV	Antioxidant
	IGSENSEKTT	ACE-inhibitory
	EQLLRLKKY	Antimicrobial
	TDAPSFSIDIPNPIGSENSEK TTM(+15.99)P, TDAPSFSIDIPNPIGSENSEK TTMP	ACE-inhibitory
	IKHQGLPQEVLNENLL	Antioxidant
	APFPEVFGKEK	Antioxidant
	YVPLGTQYTDAPSFSIDIPN PIGSENSEKTTM(+15.99), YVPLGTQYTDAPSFSIDIPN PIGSENSEKTTM	ACE-inhibitory
	YVPLGTQYTDAPSFSIDIPN PIGSENSEKTTMPL, YVPLGTQYTDAPSFSIDIPN PIGSENSEKTTM(+15.99)PL	ACE-inhibitory
	QYTDAPSFSIDIPNPIGSENS EKTTM(+15.99)P, QYTDAPSFSIDIPNPIGSENS EKTTMP	ACE-inhibitory
	LEQLLRL	Antimicrobial
	HPIKHQGLPQEVE	Antimicrobial
	FFVAPFPEVFGK	ACE-inhibitory
	NPIGSENSEKTTM(+15.99) P, NPIGSENSEKTTMP	ACE-inhibitory
	GTQYTDAPSFSIDIPNPIGSE NSEKTTMP, GTQYTDAPSFSIDIPNPIGSE NSEKTTM(+15.99)P	ACE-inhibitory
	TQYTDAPSFSIDIPNPIGSEN SEKTTM(+15.99)P, TQYTDAPSFSIDIPNPIGSEN SEKTTMP	ACE-inhibitory

	RPKHPIKHQGLPQEVLNE NLLR	Antimicrobial Immunomodulatory
	PIGSENSEKTTM(+15.99)PL W, PIGSENSEKTTMPLW	ACE-inhibitory
	VPQLEIVPNS(+79.97)AEER LH, VPQLEIVPNSAEERLH	Promote calcium uptake
	YKVPQLEIVPNS(+79.97)A EERLH, YKVPQLEIVPNSAEERLH	Promote calcium uptake
	HPIKHQGLPQEVLNENL	Antioxidant
	VAPFPEVFGKEKVNELS	induce macedocin biosynthesis
	FPEVFGKEK	Antioxidant
	RPKHPIKHQGLPQEVLNE NL	Antimicrobial Immunomodulatory
	KEDVPSER	Osteoanabolic
	QYTDAPSFSIDPNPIGSENS EKTTMPLW, QYTDAPSFSIDPNPIGSENS EKTTM(+15.99)PLW, QYTDAPSFSIDPNPIGS(+79 .97)ENSEKTTM(+15.99)PL W, QYTDAPSFSIDPNPIGSENS (+79.97)EKTTMPLW	ACE-inhibitory
	FPEVFGKEKV	Antioxidant
	FVAPFPEVFGKEKVNE	induce macedocin biosynthesis
	YYVPLGTQYTDAPSFSIDIP NPIGSENSEKTTM(+15.99) P, YYVPLGTQYTDAPSFSIDIP NPIGSENSEKTTMP	ACE-inhibitory
	LKKYKVPQLEIVPNS(+79. 97)AEER, LKKYKVPQLEIVPNSAEER	Promote calcium uptake
	YKVPQLEIVPNS(+79.97)A EERLHS, YKVPQLEIVPNSAEERLHS	Promote calcium uptake
	HPIKHQGLPQEVLNENLL	Antioxidant
	PFPEVFGK	ACE-inhibitory Antioxidant
	LEQLRLK	Antimicrobial
	PIGSENSEKTTMP,	ACE-inhibitory

		PIGSENSEKTTM(+15.99)P	
		IGSENSEKTTMPL, IGSENSEKTTM(+15.99)PL, IGS(+79.97)ENSEKTTM(+1 5.99)PL	ACE-inhibitory
		KHPIKHQGLPQEVLNENL LR	Antimicrobial Immunomodulatory
		FVAPFPEVFGK	ACE-inhibitory
		LEQLLRLKKY	Antimicrobial
		APFPEVFGK	ACE-inhibitory Antioxidant
		RPKHPIK	Antimicrobial ACE-inhibitory
		HPIKHQGLPQE	Antimicrobial
		PIGSENSEKTT	ACE-inhibitory
		FFVAPFPEVFGKEK	ACE-inhibitory
		FPEVFGK	ACE-inhibitory
		KVPQLEIVPNS(+79.97)AE ER, KVPQLEIVPNSAEER	Promote calcium uptake
		YLEQLR	Antimicrobial
		HQGLPQEVLNENLLR	Antioxidant
		KDIGSESTEDQAM(+15.99) EDI	Promote calcium uptake
		DIGSESTEDQAM(+15.99)E DIK, DIGS(+79.97)ES(+79.97)TE DQAMEDIK, DIGS(+79.97)ES(+79.97)TE DQAM(+15.99)EDIK, DIGSESTEDQAMEDIK, DIGSES(+79.97)TEDQAM(+ 15.99)EDIK, DIGSES(+79.97)TEDQAME DIK	Promote calcium uptake
		NPIGSENSEKTT	ACE-inhibitory
		HQGLPQEVLNENL	Antioxidant
		KVPQLEIVPNS(+79.97)AE ERLHS, KVPQLEIVPNSAEERLHS	Promote calcium uptake
		SENSEKTTM(+15.99)PLW, SENSEKTTMPLW	ACE-inhibitory
		KYKVPQLEIVPNS(+79.97) AEER,	Promote calcium uptake

	KYKVPQLEIVPNSAER	
	VAPFPEVFGKEKVNL	induce macedocin biosynthesis
	EVLNENLLRF	Antimicrobial
	FVAPFPEVFGKE	ACE-inhibitory
	VAPFPEVFGKEK	ACE-inhibitory
	RPKHPI	Antimicrobial ACE-inhibitory
	YKVPQ	ACE-inhibitory
	DIPNPIGSENSEKT	Antimicrobial
	RPKHPIKH	Antimicrobial ACE-inhibitory
	TDAPSFSIDIPNPIGSENSEK TTMPLW, TDAPSFSIDIPNPIGSENSEK TTM(+15.99)PLW, TDAPSFSIDIPNPIGS(+79.97)ENSEKTTM(+15.99)PLW	ACE-inhibitory
	HQGLPQEVE	Antimicrobial
	VAPFPEVF	ACE-inhibitory
	FPEVFGKE	ACE-inhibitory Antioxidant
	FSDIPNPIGSENSEKT	Antimicrobial Antioxidant
	KVPQLEIVPNS(+79.97)AE ERLH, KVPQLEIVPNSAERLH	Promote calcium uptake
	IKHQGLPQEVLNEN	Antioxidant
	YYVPLGTQYTDAPSFSIDIP NPIGSENSEKTTMPL, YYVPLGTQYTDAPSFSIDIP NPIGSENSEKTTM(+15.99) PL	ACE-inhibitory
	SDIPNPIGSENSEKT	Antimicrobial
	GSENSEKTTMP, GSENSEKTTM(+15.99)P	ACE-inhibitory
	YTDAPSFSIDIPNPIGSENSE KTTM(+15.99)P, YTDAPSFSIDIPNPIGSENSE KTTMP	ACE-inhibitory
	NPIGSENSEKTTMPL, NPIGSENSEKTTM(+15.99) PL	ACE-inhibitory

DVPSERY	ACE-inhibitory Osteoanabolic
VAPFPEVFG	ACE-inhibitory
QYTDAPSFSIDPNPIGSENS EKTTM(+15.99)PL, QYTDAPSFSIDPNPIGSENS EKTTMPL	ACE-inhibitory
TDAPSFSIDPNPIGSENSEK T	Antioxidant
YLEQLLRLK	Antimicrobial
FFVAPFPEVFGKEKV	ACE-inhibitory
IGSENSEKTTM, IGSENSEKTTM(+15.99)	ACE-inhibitory
RPKHPIKHQGLPQEVLNE NLL	Antimicrobial Immunomodulatory
SDIPNPIGSENSEK	Antimicrobial
IKHQGLPQEVEV	Antimicrobial
TDAPSFSIDPNPIGSENSEK TTM(+15.99)PL, TDAPSFSIDPNPIGSENSEK TTMPL	ACE-inhibitory
LSKDIGSESTEDQAM(+15. 99)ED, LSKDIGS(+79.97)ES(+79.97)TEDQAM(+15.99)ED, LSKDIGSESTEDQAMED, LSKDIGSEST(+79.97)EDQ AMED, LS(+79.97)KDIGSESTEDQ AM(+15.99)ED	Promote calcium uptake
KYKVPQ	ACE-inhibitory
TDAPSFSIDPNPIGSENSEK	Antioxidant
NENLLR	ACE-inhibitory
YKVPQLEIVPNSAEE, YKVPQLEIVPNS(+79.97)A EE	Promote calcium uptake
VPSERYLG	ACE-inhibitory
KYKVPQLEIVPNS(+79.97) AEERLH, KYKVPQLEIVPNSAEERLH	Promote calcium uptake
KHQGLPQEVEV	Antimicrobial
IKHQGLPQEVEV	Antimicrobial
SDIPNPIGSENSEKTTM(+1	Antimicrobial

	5.99), SDIPNPIGSENSEKTTM	
	SKDIGSESTEDQAM(+15.99))ED, SKDIGSESTEDQAMED, SKDIGS(+79.97)ES(+79.97) TEDQAMED, SKDIGSES(+79.97)TEDQA M(+15.99)ED, SKDIGS(+79.97)ES(+79.97) TEDQAM(+15.99)ED, SKDIGS(+79.97)ESTEDQA MED	Promote calcium uptake
	VPSERYL	ACE-inhibitory
	LGYLEQLLR	Anxiolytic Antimicrobial
	DIGSESTEDQAM(+15.99)E D, DIGSESTEDQAMED, DIGS(+79.97)ESTEDQAM(+ 15.99)ED, DIGSES(+79.97)TEDQAME D	Promote calcium uptake
	GTQYTDAPSFSIDPNPIGSE NSEKTTM(+15.99), GTQYTDAPSFSIDPNPIGSE NSEKTTM	ACE-inhibitory
	KHQGLPQEVLNENLL	Antioxidant
	KKYKVPQLEIVPNSAEER, KKYKVPQLEIVPNS(+79.97)AEER	Promote calcium uptake
	YVPLGTQYTDAPSFSIDPN PIGSENSEKT	ACE-inhibitory
	RPKHPIKHQ	ACE-inhibitory
	YVPLGTQYTDAPSFSIDPN PIGSENSEKTT	ACE-inhibitory
	YLEQLLRL	Antimicrobial
	KVPQLEIVPNSAEE, KVPQLEIVPNS(+79.97)AE E	Promote calcium uptake
	VAPFPEVFGKEKVNELSK, VAPFPEVFGKEKVNELS(+ 79.97)K	induce macedocin biosynthesis
	FVAPFPEVFG	ACE-inhibitory
	FVAPFPEVFGKEKVNELS	induce macedocin

	K	biosynthesis
	YLEQLRLKKY	Antimicrobial
	DIPNPIGSENSEKTT	Antimicrobial
	KYKVPQLEIVPNS(+79.97) AEERLHS, KYKVPQLEIVPNSAEERLHS	Promote calcium uptake
	IKHQGLPQEVLNENLLR	Antioxidant
	SENSEKTTM(+15.99)P	ACE-inhibitory
	LHENLLR	Antimicrobial
	HPIKHQGLPQEVLNENLLR	Antimicrobial Immunomodulatory
	DAPSFSIDPNPIGSENSEK	Antioxidant
	YVPLGTQYTDAPSFDIPN PIGSENSEKTTM(+15.99)PL W, YVPLGTQYTDAPSFDIPN PIGSENSEKTTMPLW	ACE-inhibitory
	GYLEQLLR	Anxiolytic Antimicrobial
	SDIPNPIGSENSEKTT	Antimicrobial
	YKVPQLEIVPNS(+79.97)A, YKVPQLEIVPNSA	Promote calcium uptake
	KQM(+15.99)EAESISSSEEI VPNSVEQ, KQMEAESISS(+79.97)EEI VPNSVEQ, KQMEAESISSSEEIVPNSV EQ, KQM(+15.99)EAESISS(+79.97)EEIVPNSVEQ, KQM(+15.99)EAESIS(+79.97)S(+79.97)SEEIVPNSVEQ, KQMEAESISS(+79.97)S(+79.97)EEIVPNSVEQ	Immunomodulatory
	VPQLEIVPNS(+79.97)AEERL, VPQLEIVPNSAEERL	Promote calcium uptake
	VPQLEIVPNSAEE, VPQLEIVPNS(+79.97)AEE	Promote calcium uptake
	KDIGSESTEDQAM(+15.99) ED, KDIGSESTEDQAMED, KDIGS(+79.97)ES(+79.97)TEDQAM EDQAM(+15.99)ED, KDIGSES(+79.97)TEDQAM	Promote calcium uptake

	(+15.99)ED, KDIGSES(+79.97)TEDQAM ED, KDIGS(+79.97)ES(+79.97)T EDQAMED	
	IGSENSEKTTM(+15.99)PL W, IGSENSEKTTMPLW	ACE-inhibitory
	DVPSERYL	ACE-inhibitory
	FVAPFPEVFGKEKVNELS	induce macedocin biosynthesis
	IGSESTEDQAMEDIK, IGSESTEDQAM(+15.99)EDI K	Promote calcium uptake
	TDAPSFSIDIPNPIGSENSE	Antioxidant
	PIGSENSEKTTM(+15.99)PL , PIGSENSEKTTMPL	ACE-inhibitory
	PIKHQGLPQEVLNENLL	Antioxidant
	NPIGSENSEKTTM(+15.99)	ACE-inhibitory
	PFPEVFGKEK	Antioxidant ACE-inhibitory
	KVPQLEIVPNSAE	Promote calcium uptake
	IKHQGLPQEVLNENL	Antioxidant
	QLLRLKKY	Antimicrobial
	TQYTDAPSFSIDIPNPIGSEN SEKTTM(+15.99)PL, TQYTDAPSFSIDIPNPIGSEN SEKTTMPL	ACE-inhibitory
	GYLEQLLRLK	Anxiolytic Antimicrobial
	DAPSFSIDIPNPIGSENSEKT TMPLW, DAPSFSIDIPNPIGSENSEKT TM(+15.99)PLW	ACE-inhibitory
	QGLPQEVLNENLL	Antioxidant
	RLKKYKVPQ	Antimicrobial
	IPNPIGSENSEKTT	Antimicrobial
	KHQGLPQEVLNENL	Antioxidant
	GLPQEVLNENLLRF	Antioxidant
	ENLLRFF	ACE-inhibitory
	EVLNENLLR	Antimicrobial
	KHQGLPQEVLNENLLR	Antioxidant
	KHQGLPQEVLNEN	Antioxidant

	KHQGLPQE	Antimicrobial
	VLNENLLR	Antimicrobial
	FFVAPFPEVFGKE	ACE-inhibitory
	IPNPIGSENSEKT	Antimicrobial
	IGSESTEDQAMED, IGSESTEDQAM(+15.99)ED, IGSES(+79.97)TEDQAM(+1 5.99)ED, IGS(+79.97)ESTEDQAMED	Promote calcium uptake
	LGTQYTDAPSFSIDPNPIGS ENSEKTTMP, LGTQYTDAPSFSIDPNPIGS ENSEKTTM(+15.99)P	ACE-inhibitory
	APSFSIDPNPIGSENSEKTT M(+15.99)PLW, APSFSIDPNPIGSENSEKTT MPLW	ACE-inhibitory
	ARPCKHPIKH	ACE-inhibitory
	SKDIGSESTEDQAM(+15.99)EDIK, SKDIGSESTEDQAMEDIK	Promote calcium uptake
	IPNPIGSENSEKTTM(+15.9 9), IPNPIGSENSEKTTM	Antimicrobial
	RPKHPHQGL	ACE-inhibitory
	GSENSEKTTMPLW, GSENSEKTTM(+15.99)PLW	ACE-inhibitory
	TDAPSFSIDPNPIGSEN	Antioxidant
	DAPSFSIDPNPIGSENSEKT TM(+15.99)PL, DAPSFSIDPNPIGSENSEKT TMPL	ACE-inhibitory
	PLGTQYTDAPSFSIDPNPIG SENSEKTTM(+15.99)P, PLGTQYTDAPSFSIDPNPIG SENSEKTTMP	ACE-inhibitory
	KYKVPQLEIVPNS(+79.97) AEERL, KYKVPQLEIVPNSAEERL	Promote calcium uptake
	SKDIGSESTEDQAM(+15.99)EDI, SKDIGSESTEDQAMEDI	Promote calcium uptake
	DAPSFSIDPNPIGSENSE	Antioxidant
	KKYKVPQLEIVPNSA, KKYKVPQLEIVPNS(+79.97)	Promote calcium uptake

)A	
	YTDAPSFSIDPNPIGSENSEK	Antioxidant
	HQGLPQEVLN	Antimicrobial
	DIPNPIGSENSEKTTM(+15.99), DIPNPIGSENSEKTTM	Antimicrobial
	SENSEKTTM(+15.99)PL, SENSEKTTMPL	ACE-inhibitory
	TQYTDAPSFSIDPNPIGSENSEKTTM(+15.99)PLW, TQYTDAPSFSIDPNPIGSENSEKTTMPLW	ACE-inhibitory
	YYVPLGTQYTDAPSFSIDPNPIGSENSEKTT	ACE-inhibitory
	LKKYKVPQLEIVPNSAEE, LKKYKVPQLEIVPNS(+79.97)AEE	Promote calcium uptake
	QM(+15.99)EAESISSSEEIVPNSVEQ	Immunomodulatory
	SESTEDQAMEDIK, SESTEDQAM(+15.99)EDIK	Promote calcium uptake
	KYKVPQLEIVPNS(+79.97)A, KYKVPQLEIVPNSA	Promote calcium uptake
	GTQYTDAPSFSIDPNPIGSENSEKTTM(+15.99)PLW, GTQYTDAPSFSIDPNPIGSENSEKTTMPLW	ACE-inhibitory
	LGTQYTDAPSFSIDPNPIGSENSEKTTM(+15.99), LGTQYTDAPSFSIDPNPIGSENSEKTTM	ACE-inhibitory
	YVPLGTQYTDAPSFSIDPNPIGSENSEK	ACE-inhibitory
	FFVAPFPEVFGKEKVNE	induce macedocin biosynthesis
	DAPSFSIDPNPIGSENSEKTT	Antioxidant
	FVAPFPEVFGKEKVNEL	induce macedocin biosynthesis
	ENLLRF	ACE-inhibitory
	KDIGSESTEDQAM(+15.99)EDIK	Promote calcium uptake
	DIPNPIGSENSEK	Antimicrobial
	LKKYKVPQLEIVPNS(+79.97)A,	Promote calcium uptake

	LKKYKVPQLEIVPNSA	
	YYVPLGTQYTDAPSFSIDIP NPIGSENSEKTTM(+15.99), YYVPLGTQYTDAPSFSIDIP NPIGSENSEKTTM	ACE-inhibitory
	VPLGTQYTDAPSFSIDIPNPI GSENSEKTT	ACE-inhibitory
	APSFSDIPNPIGSENSE	Antioxidant
	APSFSDIPNPIGSENSEK	Antioxidant
	DAPSFSIDIPNPIGSENSEKT T	Antioxidant
	HIQKEDVPSERYLGYLEQ L	Antimicrobial
	GTQYTDAPSFSIDIPNPIGSE NSEKTTMPL, GTQYTDAPSFSIDIPNPIGSE NSEKTTM(+15.99)PL	ACE-inhibitory
	PSFSDIPNPIGSENSEKT	Antioxidant
	PKHPIKHQGLPQEVLNEN LLR	Antimicrobial Immunomodulatory
	VPLGTQYTDAPSFSIDIPNPI GSENSEKTTM(+15.99)P	ACE-inhibitory
	YTDAPSFSIDIPNPIGSENSE KTTM(+15.99)PLW, YTDAPSFSIDIPNPIGSENSE KTTMPLW	ACE-inhibitory
	QM(+15.99)EAESISSEEIV PNSVEQK, QMEAESISSEEIVPNSVE QK, QM(+15.99)EAESISS(+79.97)SEEIVPNSVEQK, QM(+15.99)EAES(+79.97)IS SS(+79.97)EEIVPNSVEQK, QMEAESIS(+79.97)SS(+79.9 7)EEIVPNSVEQK	Immunomodulatory
	QGLPQEVLNENL	Antioxidant
	YYVPLGTQYTDAPSFSIDIP NPIGSENSEKTT	ACE-inhibitory
	YKVPQLE	ACE-inhibitory
	FSDIPNPIGSENSEKTT	Antimicrobial Antioxidant
	DIGSESTEDQAMEDIKQ, DIGSESTEDQAM(+15.99)E	Promote calcium uptake

	DIKQ	
	VAPFPEV	Inhibition of cholesterol solubility
SFSDIPNPIGSENSEKT		Antimicrobial
		Antioxidant
	LGTQYTDAPSFSIDPNPIGS ENSEKTTM(+15.99)PL, LGTQYTDAPSFSIDPNPIGS ENSEKTTMPL	ACE-inhibitory
	PIKHQGLPQEVEV	Antimicrobial
VAPFPEVFGKEKVNELSK D, VAPFPEVFGKEKVNELS(+ 79.97)KD		induce macedocin biosynthesis
	APSFSIDPNPIGSEN	Antioxidant
KKYKVPQLEIVPNS(+79.97)AEERLH, KKYKVPQLEIVPNSAEERL H		Promote calcium uptake
	QYTDAPSFSIDPNPIGSENS E	Antioxidant
GSENSEKTTMPL		ACE-inhibitory
	HQGLPQEVL	Antimicrobial
QEVLNENLLR		Antimicrobial
	LGTQYTDAPSFSIDPNPIGS ENSEKTT	ACE-inhibitory
RPKHPHIHQGLPQEVLNE NLLRF		Antimicrobial
		Immunomodulatory
SFSDIPNPIGSENSEKTT		Antioxidant
	PSFSDIPNPIGSENSEKTTM (+15.99)	Antioxidant
KTTMPLW		Antimicrobial
		ACE-inhibitory
DAPSFSIDPNPIGSEN		Antioxidant
	APFPEVFG	ACE-inhibitory
YTDAPSFSIDPNPIGSENSE KTTM(+15.99)PL, YTDAPSFSIDPNPIGSENSE KTTMPL		ACE-inhibitory
	RPKHPHIHQG	ACE-inhibitory
	KKYKVPQLEIVPNSAEE	Promote calcium uptake

	FVAPFPEV	ACE-inhibitory
	QYTDAPSFSIDIPNPIGSENS EKTT	ACE-inhibitory
FSDIDIPNPIGSENSEK		Antimicrobial
		Antioxidant
	IPNPIGSENSEK	Antimicrobial
PKHPIKHQGLPQEVLNEN LL		Antimicrobial
		Immunomodulatory
PFPEVFGKE		Antioxidant
		ACE-inhibitory
	GSENSEKTTM	ACE-inhibitory
	SKDIGSESTEDQAM(+15.99))EDIKQ, SKDIGSESTEDQAMEDIKQ	Promote calcium uptake
	KYKVPQLEIVPNS(+79.97) AEE, KYKVPQLEIVPNSAEE	Promote calcium uptake
	IKHQGLPQEVLN	Antimicrobial
	YKVPQLEIVPNSAE	Promote calcium uptake
	YTDAPSFSIDIPNPIGSENSE KTTM(+15.99)	ACE-inhibitory
	KVPQLEIVPNSAEERL, KVPQLEIVPNS(+79.97)AE ERL	Promote calcium uptake
	VPLGTQYTDAPSFSIDIPNPI GSENSEKTTM(+15.99)PL, VPLGTQYTDAPSFSIDIPNPI GSENSEKTTMPL	ACE-inhibitory
	AESISSEEIVPNSVEQ	Immunomodulatory
FSDIDIPNPIGSENSE		Antimicrobial
		Antioxidant
	PLGTQYTDAPSFSIDIPNPI SENSEKTTM(+15.99)	ACE-inhibitory
KHPIKHQGLPQEVLNENL LRF		Antimicrobial
		Immunomodulatory
	FVAPFPEVFGKEKVNELS KD	induce macedocin biosynthesis
	ARPKHPIK	Antimicrobial
SFSDIDIPNPIGSENSE		Antimicrobial
		Antioxidant

	YKVPQLEIVPNS(+79.97)A EERL, YKVPQLEIVPNSAEERL	Promote calcium uptake
	PIKHQGLPQEVLNENL	Antioxidant
	HPIKHQGLPQEVLNE	Antioxidant
	IGSESTEDQAM(+15.99)EDI KQ, IGSESTEDQAMEDIKQ	Promote calcium uptake
	RFFVAPFPEVFGKEKV	induce macedocin biosynthesis
	DAPSFSIDIPNPIGSENS	Antioxidant
	APSFSIDIPNPIGSENSEKT	Antioxidant
	YYVPLGTQYTDAPSFSIDIP NPIGSENSEK	ACE-inhibitory
	TDAPSFSIDIPNPIGSENS	Antioxidant
	SFSDIPNPIGSENSEK	Antimicrobial
		Antioxidant
	YKVPQL	ACE-inhibitory
	GTQYTDAPSFSIDIPNPIGSE NSEKTT	ACE-inhibitory
	FFVAPFPEVFGKEKVNELS	induce macedocin biosynthesis
	LGTQYTDAPSFSIDIPNPIGS ENSEK	ACE-inhibitory
	APSFSIDIPNPIGSENSEKTT	Antioxidant
	TQYTDAPSFSIDIPNPIGSEN SEKTT	ACE-inhibitory
	GYLEQLLRL	Anxiolytic
		Antimicrobial
	KYKVPQL	ACE-inhibitory
	PLGTQYTDAPSFSIDIPNPIG SENSEKTTMPL, PLGTQYTDAPSFSIDIPNPIG SENSEKTTM(+15.99)PL	ACE-inhibitory
	VLNENLLRFF	Antimicrobial
	KDIGSESTEDQAM(+15.99) EDIKQ	Promote calcium uptake
	ARPCKHPIKHQ	ACE-inhibitory
	GTQYTDAPSFSIDIPNPIGSE NSEKT	ACE-inhibitory
	PSFSDIPNPIGSENSEKTT	Antioxidant
	HQGLPQEVLNENLLRF	Antioxidant
	APSFSIDIPNPIGSE	Antioxidant
	SKDIGSESTEDQAM(+15.99)	Promote calcium

)E	uptake
		KDIGSESTEDQAM(+15.99)E	Promote calcium uptake
		TDAPSFSIDIPNPIGSE	Antioxidant
		DIPNPIGSEN	Antioxidant
		LRLKKYKVPQ	Antimicrobial
		LGTQYTDAPSFSIDIPNPIGS ENSEKT	ACE-inhibitory
		TQYTDAPSFSIDIPNPIGSEN SEKTTM(+15.99)	ACE-inhibitory
		KQMEAESISSEEIVPNSV	Immunomodulatory
		SFSDIPNPIGS	Antioxidant
		PKHPIKH	Antimicrobial
		EAESISSSEEIVPNSVEQ	Immunomodulatory
		DIGSESTEDQAM(+15.99)E DIKQM(+15.99)	Promote calcium uptake
		LRLKKYKVP	Antimicrobial
P02663	CSN1S2	GPIVLNPWDQVK	Antimicrobial
		VLPWDQVK	Antimicrobial
		TKVIPYVRYL	Antimicrobial
		KPWIQPCTKVIP	Antimicrobial
		VIPYVRYL	Antimicrobial
		PYVRYL	Antioxidant
			Antimicrobial
			ACE-inhibitory
		IVLNPWDQVK	Antimicrobial
		KTKLTEEEKNRLNFL	Antimicrobial
		FALPQYLK	Antioxidant
			ACE-inhibitory
		TKVIPYVRY	Antimicrobial
		KPWIQPCT	ACE-inhibitory
		IPYVRYL	Antioxidant
			Antimicrobial
			ACE-inhibitory
		AM(+15.99)KPWIQPCTK, AMKPWIQPCTK	ACE-inhibitory
		AMKPWIQP, AM(+15.99)KPWIQP	ACE-inhibitory
		AM(+15.99)KPWIQPCT, AMKPWIQPCT	ACE-inhibitory
		VLPWDQVKRN	Antimicrobial
		M(+15.99)KPWIQPCTKVIP, MKPWIPCTKVIP	Antimicrobial

	TKVIPYVR	Antimicrobial
	RNAVPIPT	Osteoanabolic
	AM(+15.99)KPWIQPCTKVI P, AMKPWIQPCTKVIP	Antimicrobial
	KVIPYVRYL	Antimicrobial
	AM(+15.99)KPWIQPCTKVI PYVRYL, AMKPWIQPCTKVIPYVRY L	Antimicrobial
	LNPWDQVK	Antimicrobial
	ALPQYLKT	Antioxidant ACE-inhibitory
	KVIPYVRY	Antimicrobial
	TKKLTEEEKNRLNF	Antimicrobial
	VLPWDQVKR	Antimicrobial
	KFALPQYL	Antioxidant ACE-inhibitory
	FALPQYLKT	Antioxidant ACE-inhibitory
	AM(+15.99)KPWIQPK, AMKPWIQPK	ACE-inhibitory
	YQKFPQY	Antioxidant ACE-inhibitory
	AM(+15.99)KPWIQPCTKVI PY, AMKPWIQPCTKVIPY	Antimicrobial
	KPWQPK	ACE-inhibitory
	GPIVLNPWDQV	Antimicrobial
	TKKLTEEEKNRLN	Antimicrobial
	AM(+15.99)KPWIQPCTKVI PYVR, AMKPWIQPCTKVIPYVR	Antimicrobial
	M(+15.99)KPWIQPCTK, MKPWQPKTK	ACE-inhibitory
	M(+15.99)KPWIQPCTKVIP Y, MKPWQPKTKVIPY	Antimicrobial
	KRNAVPITPT	Osteoanabolic
	KAM(+15.99)KPWIQP, KAMKPWIQP	ACE-inhibitory
	NM(+15.99)AINPSKEN, NM(+15.99)AINPS(+79.97)K EN, NMAINPSKEN, NMAINPS(+79.97)KEN	ACE-inhibitory
	VYQHQKAM(+15.99)KPWI	Antimicrobial

	QPKTGVIPY, VYQHQKAMKPWIQPCTK VIPY	
	TVYQHQ	ACE-inhibitory
	TKKTKLTEEEKNRLNFL	Antimicrobial
	FLKKIS	Antimicrobial
	KPWIQPCTKVIPYVRYL	Antimicrobial
	KPWIQPCTKVIPY	Antimicrobial
	TVYQHQKAM(+15.99)KP WIQPCTKVIP, TVYQHQKAMKPWIQPCT KVIP	Antimicrobial
	FLKKISQ	Antimicrobial
	IQPCTKVIPYVRYL	Antimicrobial
	KPWIQPCTKVIPYVR	Antimicrobial
	IVLPNPWDQVKR	Antimicrobial
	YQKFPQYL	Antioxidant ACE-inhibitory
	YQKFPQ	Antioxidant ACE-inhibitory
	NAVPITPTLN	Osteoanabolic
	VYQHQKAMKPWIQPCTK VIP, VYQHQKAM(+15.99)KPWI QPCTKVIP	Antimicrobial
	ALPQYLK	Antioxidant ACE-inhibitory
	M(+15.99)KPWIQP, MKPWIQP	ACE-inhibitory
	AM(+15.99)KPWIQPCTKVI PYV, AMKPWIQPCTKVIPYV	Antimicrobial
	QKAM(+15.99)KPWIQP, QKAMKPWIQP	ACE-inhibitory
	KISQRYQKFALPQYLN	Antimicrobial
	M(+15.99)KPWIQPCTK, MKPWIQPCTK	ACE-inhibitory
	KISQRYQKFALPQYLNKT	Antimicrobial
	QPCTKVIPYVRYL	Antimicrobial
	KISQRYQKFALPQYLN	Antimicrobial
	M(+15.99)KPWIQPCTKVIP YVRYL, MKPWIQPCTKVIPYVRYL	Antimicrobial

		ISQRYQKFALPQYL	Antimicrobial
		FALPQYLKTV	Antioxidant
			ACE-inhibitory
		QFYQKFPQYL	ACE-inhibitory
		VYQHQKAM(+15.99)KPWI QPKTKVIPYVRYL, VYQHQKAMKPWIQPKTK VIPYVRYL	Antimicrobial
		AM(+15.99)KPWIQPKTKVI PYVRY, AMKPWIQPKTKVIPYVRY	Antimicrobial
		ALNEINQF	Antimicrobial
			ACE-inhibitory
			Antioxidant
		NM(+15.99)AINPSKE, NMAINPSKE	ACE-inhibitory
		M(+15.99)KPWIQPKTKVIP YV	Antimicrobial
		IPYVRY	Antioxidant
			Antimicrobial
			ACE-inhibitory
		ISQRYQKFALPQYLN	Antimicrobial
		LNPWDQVKRN	Antimicrobial
		M(+15.99)KPWIQPKTKVIP YVR, MKPWIQPKTKVIPYVR	Antimicrobial
		KFPQYLQY	ACE-inhibitory
		LNPWDQVKR	Antimicrobial
		TKTKLTEEEKNRLNF	Antimicrobial
		ISQRYQKFALPQYLKTVY QHQK	Antimicrobial
		PWIQPKTKVIPY	Antimicrobial
		SQRYQKFALPQYLKTVYQ HQ	Antimicrobial
		TKTKLTEEEKNRLN	Antimicrobial
		M(+15.99)KPWIQPK	ACE-inhibitory
		YQHQKAM(+15.99)KPWIQ PKTKVIPY, YQHQKAMKPWIQPKTKVI PY	Antimicrobial
		KPWIQPKTKVIPYV	Antimicrobial
		KFALPQY	ACE-inhibitory
		IVLPWDQVKRN	Antimicrobial

		NAVPITPTLNR	Osteoanabolic
		VLPWDQV	Antimicrobial
		IVLPWDQV	Antimicrobial
		RNAVPTPTLN	Osteoanabolic
		TVYHQHKAM(+15.99)KP WIQPCTKVIPY	Antimicrobial
		QKALNEINQ	Antimicrobial Antioxidant
		KTVDMES(+79.97)TEVFTK KTKLTEEEKNRLNFLK	Antimicrobial
		KISQRYQKFALPQYLKTV YQHQ	Antimicrobial
		ALNEINQFY	Antimicrobial ACE-inhibitory Antioxidant
		FYQKFPQYL	ACE-inhibitory
		QKALNEINQFY	Antimicrobial ACE-inhibitory Antioxidant
		FPQYLQY	ACE-inhibitory
		TVYHQHKAM(+15.99)KP WIQPCTKVIPYVRYL	Antimicrobial
		YQKFPQYLQY	ACE-inhibitory
		QKAM(+15.99)KPWIQPK	ACE-inhibitory
		KFALPQYLKT	Antioxidant ACE-inhibitory
		QKFPQYLQY	ACE-inhibitory
		QPCTKVIPYVRY	Antimicrobial
		VYHQHKAM(+15.99)KPWI QPCTKVIPYVRY	Antimicrobial
		IQPCTKVIPY	Antimicrobial
		ISQRYQKFALPQYLKT	Antimicrobial
		QKFPQY	Antioxidant ACE-inhibitory
		KAM(+15.99)KPWIQPK	ACE-inhibitory
		QKFPQYL	Antioxidant ACE-inhibitory
		NEINQFYQK	ACE-inhibitory
P02666;A0A452 DHW7	CSN2	EPVLGPVRGPFP	Cytomodulatory Antimicrobial ACE-inhibitory
		GPVRGPFP	ACE-inhibitory
		EPVLGPVR	Cytomodulatory

			ACE-inhibitory
			Immunomodulatory
			Antithrombotic
			Antioxidant
			Anti-inflammatory
	VPYPQRDM(+15.99)PIQA, VPYPQRDMPIQA		Antimicrobial
	KIEKFQSEEQQQTDELQDK, KIEKFQS(+79.97)EEQQQT EDELQDK		Promote calcium uptake
	GPVRGPFPIIV	ACE-inhibitory	
	EPVLGPVRGPFPIIV	immunomodulatory	
		antithrombin	
		Antimicrobial	
		ACE-inhibitory	
		Antimicrobial	
	M(+15.99)PFPKYPVEPFTE SQS, MPFPKYPVEPFTESQS	Antioxidant	
	FPKYPVEPFTESQL, FPKYPVEPFTES(+79.97)QS L	ACE-inhibitory	
	HKEMPFPKYPVEPFTESQS L, HKEM(+15.99)PFPKYPVEP FTESQL, HKEMPFPKYPVEPFTESQS (+79.97)L	Antioxidant	
	QEPVLGPVRGPFPIIV	immunomodulatory	
		antithrombin	
		Antimicrobial	
		ACE-inhibitory	
	VLGPVRGPFPP	Cytomodulatory	
		ACE-inhibitory	
	HKEM(+15.99)PFP, HKEMPFPP	Antimicrobial	
	VKEAM(+15.99)APKH, VKEAMAPKH	Antioxidant	
		Antimicrobial	
	VPYPQRD	Antioxidant	
		Antimicrobial	
		ACE-inhibitory	
	YPFPGPPIPNA	prolyl	

			endopeptidase-inhibitory
			PEP-inhibitory
			DPP-IV Inhibitory
			ACE-inhibitory
			Antioxidant
			anti-anxiety
		VLPVPQK	Antioxidant
			Antimicrobial
			ACE-inhibitory
			Wound healing
			Osteoanabolic
			anti-apoptotic effect
			Anti-inflammatory
			Inhibition of cholesterol solubility
		EPVLGPVRGPFPI	Antimicrobial
			ACE-inhibitory
		GPVRGPFPII	ACE-inhibitory
		FPKYPVEPFTESQS	ACE-inhibitory
		HKEM(+15.99)PFPKYPVEPFTESQLT, HKEMPFPKYPVEPFTESQS LT	Antioxidant
		RGPFPPIV	ACE-inhibitory
		KIEKFQS(+79.97)EEQQQT EDELQDKIHPFA, KIEKFQSEEQQQTEDELQD KIHPFA	Promote calcium uptake
		IEKFQS(+79.97)EEQQQTE DELQD, IEKFQSEEQQQTEDELQD	Promote calcium uptake
		EM(+15.99)PFPKYPVEPFT ESQ, EMPFPKYPVEPFTESQ	Antioxidant
		EPVLGPVRGPFPII	immunomodulatory
			antithrombin
			Antimicrobial
			ACE-inhibitory
		YPVEPFTESQL	ACE-inhibitory
		M(+15.99)PFPKYPVEPFT SQSLT, MPFPKYPVEPFTESQLT	Antioxidant

		QEPVLGPVRGPFP	Antimicrobial ACE-inhibitory
		KEM(+15.99)PFPKYPVEPF TESQL, KEMPFPKYPVEPFTESQL	Antioxidant
		KIEKFQS(+79.97)EEQQQT EDELQDKIHPF, KIEKFQSEEQQQTEDELQD KIHPF	Promote calcium uptake
		SQSKVLPVPQKAVPYPQR DMP, SQSKVLPVPQKAVPYPQR DM(+15.99)P	Antioxidant
		FQSEEQQQTEDELQDK, FQS(+79.97)EEQQQTEDEL QDK	Promote calcium uptake
		HKEM(+15.99)PFPKYPVEP FTESQ, HKEMPFPKYPVEPFTESQ	Antioxidant
		SKVKEAM(+15.99)APKH, SKVKEAMAPKH	Antimicrobial
		MPFPKYPVEPFTESQL, M(+15.99)PFPKYPVEPFTE SQL, MPFPKYPVEPFT(+79.97)E SQL	Antioxidant
		SKVKEAMAPK, SKVKEAM(+15.99)APK	Antioxidant Antimicrobial
		VKEAMAPK, VKEAM(+15.99)APK	Antioxidant Antimicrobial
		FQSEEQQQTEDELQDKIHP FAQT, FQS(+79.97)EEQQQTEDEL QDKIHPFAQT	Promote calcium uptake
		M(+15.99)PFPKYPVEPFTE SQ, MPFPKYPVEPFTESQ	Antioxidant
		KEAMAPKH, KEAM(+15.99)APKH	Antioxidant Antimicrobial
		EM(+15.99)PFPKYPVEPFT ESQS, EMPFPKYPVEPFTESQS	Antioxidant
		EPVLGPVRGP	Cytomodulatory
			ACE-inhibitory
			Immunomodulatory

			Antithrombotic
			Antioxidant
			Anti-inflammatory
	KFQS(+79.97)EEQQQTEDE LQDK, KFQSEEQQQTEDELQDK	Promote calcium uptake	
	FQSEEQQQTEDELQDKIHP FAQTQS, FQS(+79.97)EEQQQTEDEL QDKIHPFAQTQS	Promote calcium uptake	
	EAMAPKHK, EAM(+15.99)APKHK	Antimicrobial	
	SKVKEAM(+15.99)APKHK EMPFPKYPVEPFTESQ, SKVKEAM(+15.99)APKHK EM(+15.99)PFPKYPVEPFT ESQ, SKVKEAMAPKHKEMPFF KYPVEPFTESQ	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing Opioid increases mMuc4 expression increase small intestinal goblet cell density Increase MUC2 expression	
	PVRGPFPIIV	ACE-inhibitory	
	MPFPKYPVEP, M(+15.99)PFPKYPVEP	ACE-inhibitory Antioxidant	
	FQS(+79.97)EEQQQTEDEL QDKIHPF, FQSEEQQQTEDELQDKIHP F	Promote calcium uptake	
	LPPTVMFPPQSVL, LPPTVM(+15.99)FPPQSVL	DPP-IV Inhibitory	
	HPFAQTQ	prolyl endopeptidase-inhibitory PEP-inhibitory	
	HKEM(+15.99)PFPKYPVEP FTESQS, HKEMPFPKYPVEPFTESQS	Antioxidant	

		KFQSEEQQQTEDELQDKI HPFAQTQ, KFQS(+79.97)EEQQQTEDE LQDKIHPFAQTQ	Promote calcium uptake
		EM(+15.99)PFPK	Increase MUC4 expression
			Bradykinin-Potentiating
			Antimicrobial
			ACE-inhibitory
		FQS(+79.97)EEQQQTEDEL QD, FQSEEQQQTEDELQD	Promote calcium uptake
		VKEAM(+15.99)APKHKE M(+15.99)PFPKYPVEPFTESQ SL, VKEAMAPKHKE(+15.99) PFPKYPVEPFTESQL, VKEAMAPKHKEMPFPKY PVEPFTESQL	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing
			Opioid
			increases mMuc4 expression
			increase small intestinal goblet cell density
			Increase MUC2 expression
		GVSKVKEAM(+15.99)APK HKEM(+15.99)PFPKYPVEP FTESQ, GVSKVKEAMAPKHKE(+ 15.99)PFPKYPVEPFTESQ, GVSKVKEAMAPKHKEMP FPKYPVEPFTESQ	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing
			Opioid
			increases mMuc4 expression
			increase small intestinal goblet cell density
			Increase MUC2 expression

	LTDVENLHLP	ACE-inhibitory
	S(+79.97)EEQQQTEDELQD KIHPFAQTQ, SEEQQQTEDELQDKIHPFA QTQ	Promote calcium uptake
	EEQQQTEDELQDKIHPFA QTQ	Promote calcium uptake
	VLGPVRGPFPPII	ACE-inhibitory
	SKVKEAMAPKHK, SKVKEAM(+15.99)APKHK	Antimicrobial
	SLSQS ^K VLPVPQKAVPYP	Antioxidant
	IHPFAQT	prolyl endopeptidase-inhibitory
	SQS ^K VLPVPQK	PEP-inhibitory
	ACE-inhibitory	
	SLSQS ^K VLPVPQKAVPYP QR	Antioxidant
	KEAMAPKHKEMPFPKYP VEPFTESQL, KEAM(+15.99)APKHKEMP FPKYPVEPFTESQL, KEAM(+15.99)APKHKEM(+15.99)PFPKYPVEPFTESQ SL	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing
		Opioid
		increases mMuc4 expression
		increase small intestinal goblet cell density
		Increase MUC2 expression
	AVPYPQRD	Antioxidant
		Antimicrobial
		ACE-inhibitory
	VRGPFPPI	ACE-inhibitory
	VRGPFPPIIV	ACE-inhibitory
	PVPQKAVPYPQRDM(+15.9 9)P, PVPQKAVPYPQRDMP	Antimicrobial
	GVSKVKEAM(+15.99)APK HKEMPFPKYPVEPFTESQS LT,	protective effects in indomethacin-induced

		GVSKVKEAM(+15.99)APK HKEM(+15.99)PFPKYPVEP FTESQLT, GVSKVKEAMAPKHKEMP FPKYPVEPFTESQLT	enteritis through preservation of goblet cells and improvement in wound healing Opioid increases mMuc4 expression increase small intestinal goblet cell density Increase MUC2 expression
		KEM(+15.99)PFPK, KEMPFPK	Increase MUC4 expression Bradykinin-Potentiating Antimicrobial ACE-inhibitory
		SKVKEAM(+15.99)APKHK EM(+15.99)PFPKYPVEPFT ES, SKVKEAMAPKHKEM(+15. 99)PFPKYPVEPFTES, SKVKEAMAPKHKEMPFP KYPVEPFTES	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing Opioid increases mMuc4 expression increase small intestinal goblet cell density Increase MUC2 expression
		EM(+15.99)PFPKYPVEPFT ESQL, EMPFPKYPVEPFTESQL	Antioxidant
		KVKEAM(+15.99)AP, KVKEAMAP	Antioxidant Antimicrobial
		RELEELN	Antioxidant
		HKEM(+15.99)PFPK, HKEMPFPK	Antimicrobial
		IPPLTQTP	DPP-IV Inhibitory

			ACE-inhibitory
	DVENLHLPLP		ACE-inhibitory
			Antimicrobial
	VKEAM(+15.99)APKHK, VKEAMAPKHK		Antioxidant
			Antimicrobial
	EKFQSEEQQQTEDELQD, EKFQS(+79.97)EEQQQTED ELQD	Promote calcium uptake	
	QEPVLGPVR	Cytomodulatory	
		ACE-inhibitory	
		Immunomodulatory	
		Antithrombotic	
		Antioxidant	
		Anti-inflammatory	
	IEKFQS(+79.97)EEQQQTE DELQDK, IEKFQSEEQQQTEDELQDK	Promote calcium uptake	
	SEEQQQTEDELQDK, S(+79.97)EEQQQTEDELQD K	Promote calcium uptake	
	YPFPPIPNSLPQNIPP	ACE-inhibitory	
	FQSEEQQQTEDELQDKIHP FAQTQ, FQS(+79.97)EEQQQTEDEL QDKIHPFAQTQ	Promote calcium uptake	
	QRDM(+15.99)PIQA, QRDMPIQA	ACE-inhibitory	
	KIEKFQSEEQQQTEDELQD KIHP, KIEKFQS(+79.97)EEQQQTE DELQDKIHP	Promote calcium uptake	
	IHPFAQTQ	prolyl endopeptidase-inhibito ry	
		PEP-inhibitory	
	VPYPQRDM(+15.99)PIQAF L, VPYPQRDMPIQAF	Antimicrobial	
	EEQQQTEDELQDK	Promote calcium uptake	
	EM(+15.99)PFPKYPVEPFT ES, EMPFPKYPVEPFTES	Antioxidant	
	EPVLGPVRGPF	Cytomodulatory	
		ACE-inhibitory	

		KEAM(+15.99)APKHKEM(+15.99)PFPKYPVEPFTESEQ, KEAM(+15.99)APKHKEMP FPKYPVEPFTESEQ, KEAMAPKHKEMPFPKYP VEPFTESEQ	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing Opioid increases mMuc4 expression increase small intestinal goblet cell density Increase MUC2 expression
		LEELNVPGEIVES	Antimicrobial
		VPYPQRDM(+15.99)PIQAF, VPYPQRDMPIQAF	Antimicrobial
		KAVPYPPQRDM(+15.99)PIQ AFL, KAVPYPPQRDMPIQAF	Antimicrobial
		SSS(+79.97)EESITR, SSSEESITR, SS(+79.97)S(+79.97)EESITR	Antimicrobial
		GVSKVKEAM(+15.99)APK, GVSKVKEAMAPK	Antimicrobial
	YQEPVLGPVRGPFPIIV		immunomodulatory
			antithrombin
			Antimicrobial
			ACE-inhibitory
		AVPYPPQRDM(+15.99)PIQAF, AVPYPPQRDMPIQAF	Antimicrobial
	QEPVLGPVRGPFPII		immunomodulatory
			antithrombin
			Antimicrobial
			ACE-inhibitory
			Antimicrobial
	KEAMAPK, KEAM(+15.99)APK		Antioxidant
			Antimicrobial
	SEESITRIN, S(+79.97)EESITRIN		Antimicrobial
	KVKEAM(+15.99)APK,		Antioxidant

	KVKEAMAPK	Antimicrobial
	EAMAPKH, EAM(+15.99)APKH	Antimicrobial
	KEMPFPKYPVEPFTESQS, KEM(+15.99)PFPKYPVEPF TESQS	Antioxidant
	GPVRGPFPI	ACE-inhibitory
	LSS(+79.97)S(+79.97)EESIT R, LSSSEESITR, LSS(+79.97)SEESITR	Antimicrobial
	DVENLHLPLPLLQ	ACE-inhibitory Antimicrobial
	VKEAM(+15.99)APKHKEM (+15.99)PFPKYPVEPFTESQ S, VKEAM(+15.99)APKHKEM PFPKYPVEPFTESQS, VKEAMAPKHKEMPFPKY PVEPFTESQS	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing Opioid increases mMuc4 expression increase small intestinal goblet cell density Increase MUC2 expression
	FQSEEQQQTEDELQDKIH, FQS(+79.97)EEQQQTEDEL QDKIH	Promote calcium uptake
	SLPQNIPPLTQTPVVVPPFL QPEVMGV, SLPQNIPPLTQTPVVVPPFL QPEVM(+15.99)GV	ACE-inhibitory
	EM(+15.99)PFPKYPVEPFT ESQLT, EMPFPKYPVEPFTESQLT	Antioxidant
	GVSKVKEAM(+15.99)APK HKEM(+15.99)PFPKYPVEP, GVSKVKEAMAPKHKEM(+ 15.99)PFPKYPVEP	protective effects in indomethacin-induced enteritis through preservation of goblet cells and

			improvement in wound healing
			Opioid
			increases mMuc4 expression
			increase small intestinal goblet cell density
			Increase MUC2 expression
	FQS(+79.97)EEQQQTEDEL QDKIHPFA, FQSEEQQQTEDELQDKIHP FA	Promote calcium uptake	
	FPKYPVEP	ACE-inhibitory Antioxidant	
	SLSQSKVLPVPQKAVPYP QRD	Antioxidant	
	KEAMAPKHKEM(+15.99)P FPKYPVEPFTEQS, KEAM(+15.99)APKHKEM(+15.99)PFPKYPVEPFTEQS, KEAMAPKHKEMPFPKYP VEPFTESQS	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing	
		Opioid	
		increases mMuc4 expression	
		increase small intestinal goblet cell density	
		Increase MUC2 expression	
	SSSEESITRIN, SS(+79.97)SEESITRIN, S(+79.97)SS(+79.97)EESITR IN, S(+79.97)S(+79.97)S(+79.97) EESITRIN	Antimicrobial	
	LPVPQKAVPYPQRDM(+15.99)P, LPVPQKAVPYPQRDMP	Antimicrobial	
	QSEEQQQTEDELQDK,	Promote calcium	

	QS(+79.97)EEQQQTEDELQ DK	uptake
	VRGPFP	ACE-inhibitory
	KIEKFQSEEQQQTEDELQD KIH, KIEKFQS(+79.97)EEQQQT EDELQDKIH	Promote calcium uptake
	VENLHLPLP	ACE-inhibitory Antimicrobial
	TLTDVENLHLP	ACE-inhibitory
	VLPVPQKAVPYPQ	Antimicrobial
	EVM(+15.99)GVSKVKEAM (+15.99)APK, EVMGVSKVKEAM(+15.99) APK	Antimicrobial
	AVPYPQRDM(+15.99)PIQA , AVPYPQRDMPIQA	Antimicrobial
	LVYPFPGPPIP	prolyl endopeptidase-inhibitory PEP-inhibitory prolyl endopeptidase-inhibitory DPP-IV Inhibitory ACE-inhibitory Antioxidant anti-anxiety
	TPVVVPPFLQPE	Antioxidant Antimicrobial ACE-inhibitory
	VLGPVRGPFP	ACE-inhibitory
	VENLHLPL	ACE-inhibitory
	KFQSEEQQQTEDELQD, KFQS(+79.97)EEQQQTEDE LQD	Promote calcium uptake
	SKVKEAM(+15.99)APKHK EM(+15.99)PFPKYPVEPFT ESQS, SKVKEAMAPKHKEMPFP KYPVEPFTESQS, SKVKEAMAPKHKEM(+15. 99)PFPKYPVEPFTESQS	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in

			wound healing
			Opioid
			increases mMuc4 expression
			increase small intestinal goblet cell density
			Increase MUC2 expression
		IEKFQSEEQQQTEDELQDK IH	Promote calcium uptake
		TPVVVPPFLQPEV	Antioxidant Antimicrobial ACE-inhibitory
		TDVENLHLP	ACE-inhibitory
		QEPVLGPVRGP	Cytomodulatory ACE-inhibitory Immunomodulatory Antithrombotic Antioxidant Anti-inflammatory
		IPPLTQTPVVVPPFLQPEV	ACE-inhibitory
		LGPVRGPFP	ACE-inhibitory
		YQEPVLGPVRGPFP	immunomodulatory antithrombin Antimicrobial ACE-inhibitory
		SQSKEVLPVPQ	ACE-inhibitory
		SKVKEAM(+15.99)APKHK EMPFPKYPVEPFTESQLT, SKVKEAM(+15.99)APKHK EM(+15.99)PFPKYPVEPFT ESQLT, SKVKEAMAPKHKEMPFP KYPVEPFTESQLT	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing Opioid increases mMuc4 expression increase small intestinal goblet cell density Increase MUC2

			expression
		QPHQPLPP	ACE-inhibitory
		VVPPFLQPE	Antimicrobial
			protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing
		SKVKEAM(+15.99)APKHK EM(+15.99)PFPKYPVEPFT ESQLTL, SKVKEAM(+15.99)APKHK EMPFPKYPVEPFTESQLT L	Opioid
			increases mMuc4 expression
			increase small intestinal goblet cell density
			Increase MUC2 expression
		RELEELNVPGEIVESLSSSE ESITR, RELEELNVPGEIVESLSS(+ 79.97)S(+79.97)EESITR	Caseinophosphopeptide
			Immunomodulatory
			promotes calcium uptake
		VLPVPQKAVPYPQR	Antimicrobial
		DKIHPFAQTQ	prolyl endopeptidase-inhibitory
			PEP-inhibitory
			ACE-inhibitory
		SKVKEAM(+15.99)APKHK EM(+15.99)PFPKYPVEPFT ESQL, SKVKEAMAPKHKEM(+15. 99)PFPKYPVEPFTESQL, SKVKEAMAPKHKEMPF KYPVEPFTESQL	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing
			Opioid
			increases mMuc4 expression
			increase small intestinal goblet cell density

			Increase MUC2 expression
	IHPFAQTQS		prolyl endopeptidase-inhibitory
			PEP-inhibitory
	FPKYPVEPFTESQLT		ACE-inhibitory
	GVSKVKEAM(+15.99)AP, GVSKVKEAMAP		Antimicrobial
	GVSKVKEAM(+15.99)APK H, GVSKVKEAMAPKH		Antimicrobial
	GVSKVKEAMAPKHK, GVSKVKEAM(+15.99)APK HK		Antimicrobial
	EM(+15.99)PFPKYPVEPF, EMPFPKYPVEPF		ACE-inhibitory
	KEAMAPKHKEM(+15.99)P FPKYPVEPFTESQLT, KEAMAPKHKEMPPPKYP VEPFTESQLT		protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing
			Opioid
			increases mMuc4 expression
			increase small intestinal goblet cell density
			Increase MUC2 expression
	HKEM(+15.99)PFPKYPVEP FTES, HKEMPPPKYPVEPFTE		Antioxidant
	VVPPFLQPEVM(+15.99), VVPPFLQPEVM		Antimicrobial
	VSKVKEAM(+15.99)APK, VSKVKEAMAPK		Antimicrobial
	FLLYQEPLGLPV		Anti-inflammatory
			ACE-inhibitory
	PQNIPPLTQTPVVVPPF		ACE-inhibitory
	HPFAQTQS		prolyl endopeptidase-inhibitory

			ry
			PEP-inhibitory
LYQEPVLGPVRGPFP			immunomodulatory
			antithrombin
			Antimicrobial
			ACE-inhibitory
			protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing
EAM(+15.99)APKHKEM(+1 5.99)PFPKYPVEPFTESQL, EAMAPKHKE ^M PKY ^P V ^E PFTESQL, EAM(+15.99)APKHKE ^M PF PKY ^P VEPFTESQL			Opioid
			increases mMuc4 expression
			increase small intestinal goblet cell density
			Increase MUC2 expression
			Antioxidant
FPKYPVEPFTE			ACE-inhibitory
			Immunomodulatory
			Antithrombotic
			Antioxidant
			Anti-inflammatory
			ACE-inhibitory
SQS ^K VL ^P V ^P Q ^K A ^V P ^P Q ^R D			Antioxidant
SKVKEAMAPKHKE ^M PF KYPVEPF, SKVKEAM(+15.99)APKHK EM(+15.99)PFPKYPVEPF, SKVKEAMAPKH ^M (+15. 99)PFPKYPVEPF			protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing
			Opioid
			increases mMuc4 expression
			increase small

			intestinal goblet cell density
			Increase MUC2 expression
	VLSLSQSKVLPVPQKAVP YPQ		Antioxidant
			protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing
	KEAM(+15.99)APKHKE(+15.99)PFPKYPVEPFTE, KEAMAPKHKE(+15.99)PFPKYPVEPFTE		Opioid
			increases mMuc4 expression
			increase small intestinal goblet cell density
			Increase MUC2 expression
	NIPPLTQTPV		ACE-inhibitory
	SQS SKVLPVPQKAVPYPQ		Antioxidant
	YPFPGPPIPNSL		DPP-IV Inhibitory
			ACE-inhibitory
			Antioxidant
			anti-anxiety
	PFPKYPVEPFTESQL		ACE-inhibitory
	KEM(+15.99)PFPKYPVEPF TESQ, KEMPFPKYPVEPFTESQ		Antioxidant
	IEKFQS(+79.97)EEQQQTE DELQDKIHPFAQ, IEKFQSEEQQQTEDELQDK IHPFAQ		Promote calcium uptake
	SLVYPPGPPIP		prolyl endopeptidase-inhibitory
			PEP-inhibitory
			Antioxidant
			ACE-inhibitory
	FQSEEQQQTEDELQDKIHP FAQ,		Promote calcium uptake

		FQS(+79.97)EEQQQTEDEL QDKIHPFAQ	
		VLGPVRGP	Cytomodulatory ACE-inhibitory
		LSLSQSKVLPVPQKA VPYP QR	Antioxidant
		KFQS(+79.97)EEQQQTEDE LQDKIHPF, KFQSEEQQQTEDELQDKI HPF	Promote calcium uptake
		AVPYPQRDM(+15.99)PIQA FL, AVPYPQRDMPIQAFL	Antimicrobial
		GVSKVKEAM(+15.99)APK HKEM(+15.99)PFPKYPVEP FTESQL, GVSKVKEAMAPKHKEMP FPKYPVEPFTESQL, GVSKVKEAMAPKHKEM(+ 15.99)PFPKYPVEPFTESQS L	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing Opioid increases mMuc4 expression increase small intestinal goblet cell density Increase MUC2 expression
		QEPVLGPVRGPFPI	immunomodulatory antithrombin Antimicrobial ACE-inhibitory
		LSS(+79.97)S(+79.97)EESIT RINK, LSSSEESITRINK, LSSS(+79.97)EESITRINK	Antimicrobial
		GVSKVKEAMAPKHKEMP FPKYPVEPFTESQS, GVSKVKEAM(+15.99)APK HKEM(+15.99)PFPKYPVEP FTESQS, GVSKVKEAMAPKHKEM(+ 15.99)PFPKYPVEPFTESQS	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing Opioid

			increases mMuc4 expression
			increase small intestinal goblet cell density
			Increase MUC2 expression
	LSQSKVLPVPQK		ACE-inhibitory
	QNIPPLTQTPVVVPPFLQE		ACE-inhibitory
	EDELQDKIHPF		Antimicrobial
	VM(+15.99)GVSKVKEAM(+15.99)APK		Antimicrobial
	YQEPVLGPVRGPFPI		immunomodulatory
			antithrombin
			Antimicrobial
			ACE-inhibitory
	SEEQQQTEDELQDKIHP, S(+79.97)EEQQQTEDELQDKIHP		Promote calcium uptake
	YQEPVLGPVRGPFPII		immunomodulatory
			antithrombin
			Antimicrobial
			ACE-inhibitory
	VYPFPGPPIP		prolyl endopeptidase-inhibition
			PEP-inhibitory
			DPP-IV Inhibitory
			ACE-inhibitory
			Antioxidant
			anti-anxiety
	QSKVLPVPQ		ACE-inhibitory
	HQPHQPLPPTVMFPPQSV, HQPHQPLPPTVM(+15.99)FPQSV		Anti-inflammatory
			ACE-inhibitory
	SS(+79.97)S(+79.97)EESITRINK, SSS(+79.97)EESITRINK, SSSEESITRINK, S(+79.97)S(+79.97)S(+79.97)EESITRINK		Antimicrobial
	FQSEEQQQTEDELQDKIHP		Promote calcium

		, FQS(+79.97)EEQQQTEDEL QDKIHP	uptake
		S(+79.97)EESITRINK, SEESITRINK	Antimicrobial
		VKEAM(+15.99)APKHKEM (+15.99)PFPKYPVEPFTESQ ,	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing
		VKEAMAPKHKEMPFPKY PVEPFTESQ, VKEAMAPKHKEM(+15.99) PFPKYPVEPFTESQ	Opioid
			increases mMuc4 expression
			increase small intestinal goblet cell density
			Increase MUC2 expression
		VKEAM(+15.99)APKHKEM PFPKYPVEPFTESQLT, VKEAMAPKHKEMPFPKY PVEPFTESQLT	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing
			Opioid
			increases mMuc4 expression
			increase small intestinal goblet cell density
			Increase MUC2 expression
		SLSQSKVLPPVQ	ACE-inhibitory
		SLPQNIPPLTQTPVVVPPFL QPEVM(+15.99)GVSKVKE A, SLPQNIPPLTQTPVVVPPFL QPEVMGVSKVKEA	ACE-inhibitory
		QDKIHPF	ACE-inhibitory

		FPKYPVEPFT	ACE-inhibitory Antioxidant
		VLPVPQKAVPYP	Antimicrobial
		RELEELNVPGEIVESLS(+79.97)S(+79.97)SEESITRINK, RELEELNVPGEIVES(+79.97)LS(+79.97)SS(+79.97)EESI TRINK	Caseinophosphopeptid e Immunomodulatory promotes calcium uptake
		LGPVRGPF	ACE-inhibitory
		LEELNVPGEIVE	Antimicrobial
		IEKFQS(+79.97)EEQQQTE DELQ, IEKFQSEEQQQTEDELQ	Promote calcium uptake
		SLVYPFPGPPIP N	Antioxidant ACE-inhibitory
		SKVLVPVQ	Antioxidant
			Anti-inflammatory
			ACE-inhibitory
		IHPFAQTQSL	prolyl endopeptidase-inhibitory
		M(+15.99)PFPKYPVEPF, MPFPKYPVEPF	PEP-inhibitory
			ACE-inhibitory Antioxidant
		KVLPVPQKA	Antioxidant
			Anti-inflammatory
		EELNVPGEIVES	Antimicrobial
		YPVEPFTESQSLT	ACE-inhibitory
		LSSSEESITRIN, LSSS(+79.97)EESITRIN, LS(+79.97)SS(+79.97)EESIT RIN	Antimicrobial
		IEKFQSEEQQQTEDELQDK IHPFA, IEKFQS(+79.97)EEQQQTE DELQDKIHPFA	Promote calcium uptake
		LTDVENLHLPL	ACE-inhibitory
			Antimicrobial
		HQPHQPLPPTVM(+15.99)F PPQS, HQPHQPLPPTVMFPPQS	Anti-inflammatory
			ACE-inhibitory
		GVSKVKEAM(+15.99)APK HKEM(+15.99)PFPKYPVE,	protective effects in

		GVSKVKEAMAPKH ^{KEM(+15.99)} PFPKYPVE	indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing
		Opioid	
		increases mMuc4 expression	
		increase small intestinal goblet cell density	
		Increase MUC2 expression	
		YPQRDM(+15.99)PIQAFL, YPQRDMPIQAFL	Antimicrobial
		SLSQSKVLPVPQKAVPYPQ	Antioxidant
		VSKVKEAM(+15.99)APKH, VSKVKEAMAPKH	Antimicrobial
		SEEQQQTEDELQD, S(+79.97)EEQQQTEDELQD	Promote calcium uptake
	LVYPFPGPIN		prolyl endopeptidase-inhibitory
			PEP-inhibitory
			DPP-IV Inhibitory
			ACE-inhibitory
			Antioxidant
			anti-anxiety
		FQS(+79.97)EEQQQTEDELQ, FQSEEQQQTEDELQ	Promote calcium uptake
		SQSKVLPVPQKAVPYPQQRDM, SQSKVLPVPQKAVPYPQQRDM(+15.99)	Antioxidant
	KIHPFAQTQ		prolyl endopeptidase-inhibitory
			PEP-inhibitory
			ACE-inhibitory
		TPVVVPPFLQPEVM(+15.99), TPVVVPPFLQPEVM	Antioxidant
		LSLSQSKVLPVPQKAVPYP	Antioxidant

		Q	
		SEQQQTEDELQDKIHPFA Q, S(+79.97)EEQQQTEDELQD KIHPFAQ	Promote calcium uptake
		SQSKVLPVPQKA	ACE-inhibitory
		YQEPVLGPVRGPF	Antimicrobial ACE-inhibitory
		QSEEQQQTEDELQDKIHPF , QS(+79.97)EEQQQTEDELQ DKIHPF	Promote calcium uptake
		IEKFQS(+79.97)EEQQQTE DEL, IEKFQSEEQQQTEDEL	Promote calcium uptake
		IEKFQSEEQQQTEDELQDK IHPF, IEKFQS(+79.97)EEQQQTE DELQDKIHPF	Promote calcium uptake
		KEM(+15.99)PFPKYPVEPF TESQLT, KEMPFPKYPVEPFTESQL T	Antioxidant
		EQQQTEDELQDKIHPFAQ TQ	Promote calcium uptake
		KFQS(+79.97)EEQQQTEDE LQDKIHPFA, KFQSEEQQQTEDELQDKI HPFA	Promote calcium uptake
		S(+79.97)SEESITRIN, S(+79.97)S(+79.97)EESITRI N	Antimicrobial
		QDKIHPFAQTQLVYPFPG PIPN	ACE-inhibitory
		S(+79.97)S(+79.97)EESITRI NK, SSEESITRINK	Antimicrobial
		QNIPPLTQTPVVVPPF	ACE-inhibitory
		QEPVLGPVRGPF	Cytomodulatory
			Antimicrobial
			ACE-inhibitory
		VSKVKEAM(+15.99)APKH K, VSKVKEAMAPKHK	Antimicrobial
		SQSKVLPVPQKAVPYPQR	Antioxidant
		LLYQEPVLGPVRGP	Antimicrobial

			ACE-inhibitory
LLYQEPVLGPVRGPFPPI			immunomodulatory
			antithrombin
			Antimicrobial
			ACE-inhibitory
	LPPTVMFPPQSV, LPPTVM(+15.99)FPPQSV	DPP-IV Inhibitory	
KAVPYPQRDM(+15.99)PIQA A, KAVPYPQRDMPIQA		Antimicrobial	
	GVSKVKEAM(+15.99)APKH HKE	Antimicrobial	
	VSKVKEAM(+15.99)APKH KEM(+15.99)PFPKYPVEP, VSKVKEAMAPKHKEMPF PKYPVEP, VSKVKEAM(+15.99)APKH KEMPFPKYPVEP	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing Opioid increases mMuc4 expression increase small intestinal goblet cell density Increase MUC2 expression	
SLSQSKVLPVP		ACE-inhibitory	
	PQNIPPLTQTPVVVPPFLQ PE	ACE-inhibitory	
SLPQNIPPLTQTPVVVPPFL QPEVMGVSKV, SLPQNIPPLTQTPVVVPPFL QPEVM(+15.99)GVSKV		ACE-inhibitory	
	SLPQNIPPLTQTPVVVPPFL QPEVM(+15.99)GVSK	ACE-inhibitory	
SLPQNIPPLTQTPVVVPPFL QPEVM(+15.99)GVSKVKE, SLPQNIPPLTQTPVVVPPFL QPEVMGVSKVKE		ACE-inhibitory	
	LSLSQSKVLPVPQKAVPYP	Antioxidant	
EVM(+15.99)GVSKVKEAM (+15.99)APKH, EVMGVSKVKEAM(+15.99)		Antimicrobial	

		APKH, EVMGVSKVKEAMAPKH	
VLPVPQKA	YQEPVLGPVRGP	YQEPVLGPVRGP	Antioxidant
			Antimicrobial
			ACE-inhibitory
			Wound healing
			Osteoanabolic
			anti-apoptotic effect
			Anti-inflammatory
LYQEPVLGPVR	FLLYQEPVLGPVRGP	FLLYQEPVLGPVRGP	Cytomodulatory
			Antimicrobial
			ACE-inhibitory
			Immunomodulatory
			Antithrombotic
			Antioxidant
			Anti-inflammatory
LLYQEPVLGPVRGPF	VLGPVRGPFPIIV	VLGPVRGPFPIIV	M(+15.99)PFPKYPV, MPFPKYPV
			ACE-inhibitory
			ACE-inhibitory
			Immunomodulatory
			Antithrombotic
			Antioxidant
			Anti-inflammatory
IEKFQS(+79.97)EEQQQTE DELQDKIHP, IEKFQSEEQQQTDELQDK IHP	LYQEPVLGPVRGPFPI	LYQEPVLGPVRGPFPI	FLLYQEPVLGPVRGP
			Antimicrobial
			ACE-inhibitory
			LLYQEPVLGPVRGPF
			Antimicrobial
			ACE-inhibitory
			VLGPVRGPFPIIV
IEKFQSEEQQQT(+79.97)ED ELQDKIHPF, IEKFQSEEQQQTDELQDKI HPF	IPPLTQTPVVVPPFLQPE	IPPLTQTPVVVPPFLQPE	IEKFQSEEQQQT(+79.97)ED ELQDKIHPF, IEKFQSEEQQQTDELQDKI HPF
			Promote calcium uptake
			Promote calcium uptake
			immunomodulatory
			antithrombin
			Antimicrobial
			ACE-inhibitory
VM(+15.99)GVSKVKEAM(+15.99)APKH,	VM(+15.99)GVSKVKEAM(+15.99)APKH,	VM(+15.99)GVSKVKEAM(+15.99)APKH,	IPPLTQTPVVVPPFLQPE
			Antimicrobial

	VM(+15.99)GVSKVKEAMA PKH	
	SLS(+79.97)S(+79.97)S(+79. 97)EESITRIN, SLSSSEESITRIN, SLS(+79.97)SS(+79.97)EESI TRIN	Antimicrobial
	QKAVPYPQRDM(+15.99)PI QAF	Antimicrobial
	PQNIPPLTQTPVVVPPFLQ PEVM(+15.99)GVSKVKE, PQNIPPLTQTPVVVPPFLQ PEVMGVSKVKE	ACE-inhibitory
	KAVPYPQRDM(+15.99)PIQ AF, KAVPYPQRDMPIQAF	Antimicrobial
	SLSSSEESITR, SLSS(+79.97)SEESITR, SLS(+79.97)S(+79.97)SEESI TR	Antimicrobial
	TDVENLHLPLP	ACE-inhibitory Antimicrobial
	HQPLPPTVM(+15.99)FPPQ SV, HQPLPPTVMFPPQSV	Anti-inflammatory ACE-inhibitory
	PVLGPVRGPFIIV	immunomodulatory antithrombin Antimicrobial ACE-inhibitory
	KYPVEPFTESQL	ACE-inhibitory
	FPKYPVEPF	ACE-inhibitory Antioxidant
	RELEELNVPGEIVESLSSSE ES	Caseinophosphopeptid e Immunomodulatory promotes calcium uptake
	VENLHLPLPLLQ	ACE-inhibitory Antimicrobial
	KFQSEEQQQTEDELQDKI HP, KFQS(+79.97)EEQQQTEDE LQDKIHP	Promote calcium uptake
	SQSKVLVPVP	ACE-inhibitory
	LYQEPVLGPV	Antioxidant

			ACE-inhibitory
			Immunomodulatory
			Antithrombotic
			Anti-inflammatory
	KHKEM(+15.99)PFPKYPVE PFTESQS, KHKEMPFPKYPVEPFTE QS		Antioxidant
	EKFQSEEQQQTEDELQDK, EKFQS(+79.97)EEQQQTED ELQDK		Promote calcium uptake
	LYQEPVLGPVRGP		Antimicrobial
			ACE-inhibitory
			Anti-inflammatory
	EAM(+15.99)APKHKEM(+1 5.99)PFPKYPVEPFTE QS		protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing
			Opioid
			increases mMuc4 expression
			increase small intestinal goblet cell density
			Increase MUC2 expression
	LPVPQKA		Antioxidant
			Antimicrobial
			ACE-inhibitory
			Wound healing
			Osteoanabolic
			anti-apoptotic effect
	RELEELNV		Antimicrobial
	QPHQPLPPT		ACE-inhibitory
	KVKEAMAPKH, KVKEAM(+15.99)APKH		Antioxidant
			Antimicrobial
	VYPFPGPIP		prolyl endopeptidase-inhibito ry

			PEP-inhibitory
			prolyl endopeptidase-inhibitory
			DPP-IV Inhibitory
			ACE-inhibitory
			Antioxidant
			anti-anxiety
	QS(+79.97)EEQQQTEDELQ D, QSEEQQQTEDELQD		Promote calcium uptake
	M(+15.99)PFPKYPVEPFT, MPFPKYPVEPFT		ACE-inhibitory
	DELQDKIHPF		Antimicrobial
	SS(+79.97)EESITRI, SSEESITRI		Antimicrobial
	LLYQEPVLGPVR		ACE-inhibitory
			Immunomodulatory
			Antithrombotic
			Antioxidant
			Anti-inflammatory
	QEPVLGPV		Antioxidant
			ACE-inhibitory
			Immunomodulatory
			Antithrombotic
			Antioxidant
			Anti-inflammatory
	IPPLTQTPV		ACE-inhibitory
	YPFPGPPIPNS		prolyl endopeptidase-inhibitory
			PEP-inhibitory
			DPP-IV Inhibitory
			ACE-inhibitory
			Antioxidant
			anti-anxiety
	IPPLTQTPVVV		ACE-inhibitory
	VVPPFLQPEV		Antimicrobial
	PFPKYPVEPFTESQS		ACE-inhibitory
	SQSKVLPVPQKAVPYP		Antioxidant
	EDELQDKIHPFAQTQSLV YPFPGPPIP		ACE-inhibitory
	SKVKEAM(+15.99)APKHK EM(+15.99)PFPKYPVEPFT		protective effects in

		E, SKVKEAM(+15.99)APKHK EMPFPKYPVEPFTE	indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing
			Opioid
			increases mMuc4 expression
			increase small intestinal goblet cell density
			Increase MUC2 expression
		MHQPHQPLPPTVMFPPQS V, M(+15.99)HQPHQPLPPTV M(+15.99)FPPQSV, MHQPHQPLPPTVM(+15.99)FPPQSV	Anti-inflammatory
			ACE-inhibitory
		YQEPVLGPVR	Cytomodulatory
			Antioxidant
			ACE-inhibitory
			Immunomodulatory
			Antithrombotic
			Anti-inflammatory
		KYPVEPFTESQS	ACE-inhibitory
		LYQEPVLGPVRGPF	Antimicrobial
		QKAVPYQPQRDM(+15.99)PI QA, QKAVPYQPQRDMPIQA	Antimicrobial
		S(+79.97)EEQQQTEDELQD KIHPF, SEEQQQTEDELQDKIHPF	Promote calcium uptake
		NLHLPLPLLQ	ACE-inhibitory
		QSEEQQQTEDELQDKIHP	Promote calcium uptake
		LYQEPVLGPVRGPFPIIV	immunomodulatory
			antithrombin
			Antimicrobial
			ACE-inhibitory
		LYQEPVLGPVRGPFPII	immunomodulatory
			antithrombin
			Antimicrobial

			ACE-inhibitory
VPYPQR	YQEPVLGPV		Antioxidant
			DPP-IV Inhibitory
			Antimicrobial
			ACE-inhibitory
	SQS SKVLP VPQ KAVP		Antioxidant
HKEM(+15.99)PF PK YP VEP FTES QSL TL, HKEM PFPK YP VEP FTES QS LTL	EE QQ QT EDEL QDKI H TQ TPVV VP PFL QPE DVEN LHL PLPL TE DEL QDKI HPF VR GP FPII LS SQSKV LP VP		Antioxidant
			Promote calcium uptake
			Antioxidant
			ACE-inhibitory
			Antimicrobial
			Antimicrobial
HQ PH QPL PPT SKV LP VP QK	DKI HP FA DVEN LHL PL QTP VVV VP PFL QPE		ACE-inhibitory
			Anti-inflammatory
			ACE-inhibitory
			ACE-inhibitory
			Antioxidant
			Anti-inflammatory
KFQS(+79.97)EE QQ QT EDE LQDKI HPFAQ, KFQ SEE QQ QT EDEL QDKI HPFAQ	QR DM(+15.99)PI QAF EKFQ SEE QQ QT EDEL Q		ACE-inhibitory
			Promote calcium uptake
			ACE-inhibitory
			Promote calcium uptake
			Promote calcium uptake
			Promote calcium uptake

		SKVLPVPQKA	Antioxidant Anti-inflammatory ACE-inhibitory
		EEQQQTEDELQDKIHP	Promote calcium uptake
		SLPQNIPPLTQTPVVVPPFL QPEVM(+15.99)GVSKVK, SLPQNIPPLTQTPVVVPPFL QPEVMGVSKVK	ACE-inhibitory
		M(+15.99)APKHKEMPFPK YPVEPFTESEQ, M(+15.99)APKHKEM(+15.9 9)PFPKYPVEPFTESEQ, MAPKHKEMPFPKYPVEPF TESQ	Antioxidant
		YPVEPFTESQLTL	ACE-inhibitory
		VSKVKEAM(+15.99)APKH KEM(+15.99)PFPKYPVEPF TESQLT	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing Opioid increases mMuc4 expression increase small intestinal goblet cell density Increase MUC2 expression
		QPHQPLPPTVM(+15.99)FP PQSVL, QPHQPLPPTVMFPPQSVL	Anti-inflammatory ACE-inhibitory
		LPVPQKAVPYQPQRD	Antimicrobial
		GVSKVKEAM(+15.99)APK HKEM(+15.99), GVSKVKEAMAPKHKEM(+ 15.99)	Antimicrobial
		M(+15.99)GVSKVKEAM(+1 5.99)APK	Antimicrobial
		EEQQQTEDELQDKIHPFA Q	Promote calcium uptake

		VLGPVRGPF	Cytomodulatory ACE-inhibitory
		VPYPQRDM(+15.99)PIQAF LL, VPYPQRDMPIQAFLL	Antimicrobial
		HKEM(+15.99)PFPKYPVEP FTE, HKEMPFPKYPVEPFTE	Antioxidant
		QSKVLPVPQKA	ACE-inhibitory
		ENLHPLPLPLLQ	ACE-inhibitory Antimicrobial
		VLPVPQKA VPYPQRD	Antimicrobial
		PVVVPPFLQPEV	Antimicrobial ACE-inhibitory
		TDVENLHLPLPL	ACE-inhibitory Antimicrobial
		QSKVLPVPQK	Antioxidant Anti-inflammatory ACE-inhibitory
		EMPFPKYPVEP, EM(+15.99)PFPKYPVEP	ACE-inhibitory
		VLSLSQSKVLPVPQKAVP YP	Antioxidant
		LEELNVPGEIV	Antimicrobial
		SLVYPPFGPIPNSLP	ACE-inhibitory
		ENLHPLPLPLL	ACE-inhibitory Antimicrobial
		TLTDVENLHL	ACE-inhibitory
		KEM(+15.99)PFPKYPVEPF TES, KEMPFPKYPVEPFTE	Antioxidant
		PQNIPPLTQTPVVVPPFL	ACE-inhibitory
		APKHKEM(+15.99)PFPKYP VEPFTEQS, APKHKEMPFPKYPVEPFT ESQS	Antioxidant
		MPFPKY	Increase MUC4 expression Bradykinin-Potentiating Antimicrobial ACE-inhibitory
		TEDELQDKIHP	Antimicrobial
		GVSKVKEAM(+15.99)APK	protective effects

		HKEM(+15.99)PFPKYPVEP FTES, GVSKVKEAM(+15.99)APK HKEMPFPKYPVEPFTES, GVSKVKEAMAPKHKEMP FPKYPVEPFTES	in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing
			Opioid
			increases mMuc4 expression
			increase small intestinal goblet cell density
			Increase MUC2 expression
	SEEQQQTEDELQDKIH		Promote calcium uptake
	TDVENLHLPL		ACE-inhibitory Antimicrobial
	EMPFPKYPV, EM(+15.99)PFPKYPV		ACE-inhibitory
	VLPVPQKAVPYPQRDMP, VLPVPQKAVPYPQRDM(+ 15.99)P		Antimicrobial
	SKVLPVPQKAVPYP		Antimicrobial Antioxidant
	EPVLGPVRG		Cytomodulatory ACE-inhibitory Immunomodulatory Antithrombotic Antioxidant Anti-inflammatory
	EDELQDKIHPFA		Antimicrobial
	LLYQEVLGPVRGPFP		immunomodulatory antithrombin Antimicrobial ACE-inhibitory
	HQPHQPLPP		ACE-inhibitory
	KEAMAPKHK, KEAM(+15.99)APKHK		Antimicrobial
	KVLPVPQKAV		Antioxidant Anti-inflammatory
	SKVKEAM(+15.99)APKHK		protective effects

		EM(+15.99)PFPKYPVEPFT ESQSLTLTDV	in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing
			Opioid
			increases mMuc4 expression
			increase small intestinal goblet cell density
			Increase MUC2 expression
		SLVYPFPGPPIPNSLPQN	ACE-inhibitory
		EKFQSEEQQQTEDELQDKI HPFAQ	Promote calcium uptake
		EELNVPGEIVESLSSSEESI TR, EELNVPGEIVESLS(+79.97) SSEESITR	Caseinophosphopeptid e Immunomodulatory promotes calcium uptake
		KFQS(+79.97)EEQQQTEDE L, KFQSEEQQQTEDEL	Promote calcium uptake
		NLHLPLPLL	ACE-inhibitory
		LPVPQKAVPYPPQRDM, LPVPQKAVPYPPQRDM(+15 .99)	Antimicrobial
		EDELQDKIHP	Antimicrobial
		WM(+15.99)HQPHQPLPPT VMFPPQSV, WMHQPHQPLPPTVMFPPQ SV, WM(+15.99)HQPHQPLPPT VM(+15.99)FPPQSV	Anti-inflammatory ACE-inhibitory
		LGPVRGPFPII	ACE-inhibitory
		QNIPPLTQTPVVVPPFLQP EV	ACE-inhibitory
		PKYPVEPFTESQL	ACE-inhibitory
		KEM(+15.99)PFPKYPVEP, KEMPFPKYPVEP	ACE-inhibitory
		LSQSKVLVPVQ	ACE-inhibitory
		SVLSLSQSKVLVPVQ	ACE-inhibitory

	LSQSKVLPVPQKAVPYPQR	Antioxidant
	APKHKEMPFPKYPVEPFTESQ, APHKEM(+15.99)PFPKYP VEPFTESQ	Antioxidant
	FQS(+79.97)EEQQQTEDEL	Promote calcium uptake
	VYPFPGPIPNSL	Antioxidant ACE-inhibitory anti-anxiety
	EELNVPGEIVE	ACE-inhibitory Antimicrobial
	VENLHLPLPL	ACE-inhibitory Antimicrobial
	QNIPPLTQTPVVVPPFLQP EVM(+15.99)GV	ACE-inhibitory
	KIHPFAQTQS	prolyl endopeptidase-inhibitory PEP-inhibitory ACE-inhibitory
	VENLHLPLPLL	ACE-inhibitory Antimicrobial
	LHLPLPLLQ	ACE-inhibitory
	LSLSQSKVLPVPQKAVP	Antioxidant
	GVSKVKEAM(+15.99)APK HKEM(+15.99)PFPKYPVEP FTESQSLTL	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing Opioid increases mMuc4 expression increase small intestinal goblet cell density Increase MUC2 expression KIHPFAQT
		prolyl

			endopeptidase-inhibitory
			PEP-inhibitory
	IPPLTQTPVVVPPFLQPEV M(+15.99), IPPLTQTPVVVPPFLQPEV M		ACE-inhibitory
	MAPKHKEMPFPKYPVEPF TES, M(+15.99)APKHKEMPFPK YPVEPFTEs		Antioxidant
	TPVVVPPFLQP		Antimicrobial ACE-inhibitory
	VKEAM(+15.99)APKHKEM (+15.99)PFPKYPVEPFTEs		protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing
			Opioid
			increases mMuc4 expression
			increase small intestinal goblet cell density
			Increase MUC2 expression
	LPVPQKAVPYPPQ		Antimicrobial
	PVVVPPFLQPEVM(+15.99)		Antimicrobial
	LSQSKVLPVPQKAVPYPPQ RD		Antioxidant
	HKEMPFPKYP, HKEM(+15.99)PFPKYP		Antimicrobial
	SQSKVLPV		ACE-inhibitory
	SLPQNIPPLTQTPVVVPPFL QPEVM(+15.99)		ACE-inhibitory
	LPQNIPPLT		DPP-IV Inhibitory
	PVLGPVRGPFPPI		Antimicrobial ACE-inhibitory
	YFPFPGPIPNSLPQNIPPLTQ		ACE-inhibitory
	QSKVLPVPQKAVPYPP		Antimicrobial

		Antioxidant
	VYPFPPIPNSLP	ACE-inhibitory
		satiety
		reduces pancreas MDA level
		Opioid
		Increases MUC5A expression
		Increases MUC3 expression
		Increases MUC2 expression
		Increases jejunal mucus secretion
		immunomodulatory
		Anxiolytic
		Anticancer
		ACE-inhibitory
		Immunomodulatory
		Antioxidant
		prolyl endopeptidase-inhibitory
		PEP-inhibitory
		prolyl endopeptidase-inhibitory
		PEP-inhibitory
		DPP-IV Inhibitory
		anti-anxiety
		Antioxidant
		Antimicrobial
		ACE-inhibitory
		Wound healing
		Osteoanabolic
		anti-apoptotic effect
		Anti-inflammatory
	FPPQSVLSQLSKVLPVPQ	ACE-inhibitory
	QNIPPLTQTPV	ACE-inhibitory
	PFPKYPVEP	ACE-inhibitory
		Antioxidant
	TPVVVPPFLQPEVM(+15.9 9)G	Antioxidant

		QPHQPLPPTVM(+15.99)FP PQSV, QPHQPLPPTVMFPPQSV	Anti-inflammatory ACE-inhibitory
		NLHLPLPLLQS	ACE-inhibitory
		KFQSEEQQQTEDELQ, KFQS(+79.97)EEQQQTEDE LQ	Promote calcium uptake
		LPQNIPPLTQTPVVVPP	ACE-inhibitory
		DKIHPF	ACE-inhibitory
		EELNVPGEIVESLS(+79.97) S(+79.97)SEESISTRINK	Caseinophosphopeptid e Immunomodulatory promotes calcium uptake
		SLVYPPGPIPNSL	ACE-inhibitory
		QNIPPLTQTPVVVPPFLQP EVM(+15.99)GVSKVKE	ACE-inhibitory
		GVSKVKEAM(+15.99)APK HKEM(+15.99)PFPKYPVEP FT	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing Opioid increases mMuc4 expression increase small intestinal goblet cell density Increase MUC2 expression
		LGPVRGPFPPI	ACE-inhibitory
		PVRGPFP	ACE-inhibitory
		GVSKVKEAM(+15.99)APK HKEMPFPKYPVEPFTE, GVSKVKEAM(+15.99)APK HKEM(+15.99)PFPKYPVEP FTE	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing Opioid

			increases mMuc4 expression
			increase small intestinal goblet cell density
			Increase MUC2 expression
	TEDELQDKIHPFAQT		Antimicrobial
LLYQEPVLGP			Antioxidant
			ACE-inhibitory
			Immunomodulatory
			Antithrombotic
			Anti-inflammatory
	FPPQSVLSLSQSKVLPVP		ACE-inhibitory
	KEMPFPKY, KEM(+15.99)PFPKY		Antimicrobial
LLYQEPVLGPVRGPFIIV			immunomodulatory
			antithrombin
			Antimicrobial
			ACE-inhibitory
	SS(+79.97)SEESITRI, SS(+79.97)S(+79.97)EESITR I, SSSEESITRI		Antimicrobial
DVENLHLPLPLL			ACE-inhibitory
			Antimicrobial
	LSQSKVLPV		ACE-inhibitory
QKAVPYQPQRDM(+15.99)PI QAFL, QKAVPYQPQRDMPIQAFL			Antimicrobial
			ACE-inhibitory
			Antimicrobial
ENLHLPLP			ACE-inhibitory
			ACE-inhibitory
IPPLTQTPVVVPPF			ACE-inhibitory
			ACE-inhibitory
SLPQNIPPLTQTPVVVPPFL QPEV			ACE-inhibitory
			ACE-inhibitory
PVPQKAVPYQPQRD			Antimicrobial
			ACE-inhibitory
ELNVPGEIV			Antimicrobial
			ACE-inhibitory
LPQNIPPLTQTPVVVPPFL QPEVM(+15.99)GV			ACE-inhibitory
			ACE-inhibitory
PVPQKAVPYQPQR			Antimicrobial
			ACE-inhibitory
EELNVPGEIVESL			Antimicrobial
			Antimicrobial
QSKVLPVPQKAVPYQPQRD			Antioxidant

		MP	
		SKVLPVPQKAVPYPQ	Antimicrobial Antioxidant
		LVYPFPGPPIPNSL	ACE-inhibitory
		S(+79.97)EEQQQTEDELQD KIHPFA	Promote calcium uptake
		SLPQNIPPLTQTPVVVPPFL QPEVM(+15.99)G	ACE-inhibitory
		HQPHQPLPPTVM(+15.99)F PPQ, HQPHQPLPPTVMFPPQ	Anti-inflammatory ACE-inhibitory
		QS(+79.97)EEQQQTEDELQ DKIHPFAQTQ, QSEEQQQTEDELQDKIHPF AQTQ	Promote calcium uptake
		EKFQSEEQQQTEDELQDKI HP	Promote calcium uptake
		S(+79.97)EEQQQTEDELQD KIHPFAQT	Promote calcium uptake
		VEPFTESQSLTL	ACE-inhibitory
		FPKYPVEPFATESQSLTL	ACE-inhibitory
		QPHQPLPPTVM(+15.99)FP PQS, QPHQPLPPTVMFPPQS	Anti-inflammatory ACE-inhibitory
		EELNVPGEIV	ACE-inhibitory Antimicrobial
		KVLPVPQKAVPYPQ	Antimicrobial Antioxidant
		EKFQSEEQQQTEDELQDKI H	Promote calcium uptake
		TDVENLHLPLPLL	ACE-inhibitory Antimicrobial
		VSKVKEAM(+15.99)APKH KEMPFPKYPVEPFATESQS	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing Opioid increases mMuc4 expression

			increase small intestinal goblet cell density
			Increase MUC2 expression
	KAVPYPQRDM(+15.99)PIQ AFLL		Antimicrobial
	SLVYPPGPIPNSLPQ		ACE-inhibitory
	EKFQS(+79.97)EEQQQTED EL, EKFQSEEQQQTEDEL		Promote calcium uptake
	PQNIPPLTQTPVVVPPFLQ PEVM(+15.99)		ACE-inhibitory
	QQTEDELQDKIHP		Antimicrobial
	TEDELQDKIH		Antimicrobial
	YPFPGPPIPNSLPQNI		ACE-inhibitory
	NSLPQNIPLTQTPVVVPP FLQPEVM(+15.99)GVSKV KE		ACE-inhibitory
	VM(+15.99)GVSKVKEAM(+15.99)AP		Antimicrobial
	PQNIPPLTQTPVVVPPFLQ PEVM(+15.99)G		ACE-inhibitory
	QPHQPLPPTV		ACE-inhibitory
	SLPQNIPLTQTPVVVPPFL QPEVM(+15.99)GVS		ACE-inhibitory
	PVEPFTESSQLTL		ACE-inhibitory
	QEPVLGPVRG		Cytomodulatory
			ACE-inhibitory
			Immunomodulatory
			Antithrombotic
			Antioxidant
			Anti-inflammatory
	QTPVVVPPFLQPEVM(+15. 99)		Antioxidant
	PVVVPPFLQPE		Antimicrobial
			ACE-inhibitory
	KFQS(+79.97)EEQQQTEDE LQDKIH, KFQSEEQQQTEDELQDKI H		Promote calcium uptake
	KVLPVPQKAVPYPQR		Antimicrobial
			Antioxidant
	SWMHQPHQPLPPTVM(+15		Anti-inflammatory

	.99)FPPQS, SWM(+15.99)HQPHQPLPPT VM(+15.99)FPPQS, SWMHQPHQPLPPTVMFPP QS	ACE-inhibitory
	QSEEQQQTEDELQDKIH	Promote calcium uptake
	WM(+15.99)HQPHQPLPPT VM(+15.99)FPPQS, WMHQPHQPLPPTVM(+15. 99)FPPQS	Anti-inflammatory
	TEDELQDKIHPFAQ	Antimicrobial
	PQNIPPLTQTPVVVPPFLQ PEVMGVSKVKEA	ACE-inhibitory
	KHKEMPFPKYPVEPFTES QLS	Antioxidant
	ENLHPLPLLQS	ACE-inhibitory
	IPPLTQTPVVVPPFL	ACE-inhibitory
	PQNIPPLTQTPVVVPPFLQ PEVM(+15.99)GVSKV	ACE-inhibitory
	KVLVPQKAVPYPQRD	Antimicrobial Antioxidant
	YFPFPPIPNSLP	Antimicrobial ACE-inhibitory anti-anxiety
	QPHQPLPPTVM(+15.99)FP PQ, QPHQPLPPTVMFPPQ	Anti-inflammatory ACE-inhibitory
	KYPVEPFTESQLT	ACE-inhibitory
	EELNVPGEIVESLSSSEESI T, EELNVPGEIVESLSS(+79.9 7)SEESIT	Caseinophosphopeptid e Immunomodulatory promotes calcium uptake
	QS(+79.97)EEQQQTEDELQ	Promote calcium uptake
	KAVPYPQR	Antioxidant Antimicrobial ACE-inhibitory
	AVPYPQRDMPIQAFLL, AVPYPQRDM(+15.99)PIQA FLL	Antimicrobial
	VVVPPFLQPEVM(+15.99)	Antimicrobial
	EEQQQTEDELQDKIHPF	Promote calcium

			uptake
	PQNIPPLTQTPVVVPPFLQ PEVM(+15.99)GVS		ACE-inhibitory
	QQQTEDELQDKIHPF		Antimicrobial
	EAM(+15.99)APKHKEM(+1 5.99)PFPKYPVEPFTESQ		protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing
		Opioid	
		increases mMuc4 expression	
		increase small intestinal goblet cell density	
		Increase MUC2 expression	
	LLYQEPVLGPVRGPFPPII		immunomodulatory
		antithrombin	
		Antimicrobial	
		ACE-inhibitory	
	YFPFPPIPNSLPQNIPPLTQ T		ACE-inhibitory
	LTDVENLHLPLPL		Antimicrobial
	LNVPGGEIVESLS(+79.97)SS (+79.97)EESITR		Caseinophosphopeptid e
		Immunomodulatory	
		promotes calcium uptake	
	KEM(+15.99)PFPKYPVEPF TE		Antioxidant
	LTDVENLHL		ACE-inhibitory
	PVRGPFPPII		ACE-inhibitory
	M(+15.99)PFPKYPVE		ACE-inhibitory
	EM(+15.99)PFPKY, EMPFPKY		Increase MUC4 expression
		Bradykinin-Potentiatin g	
		Antimicrobial	
		ACE-inhibitory	

	VEPFTESQSLTLTD	ACE-inhibitory
	PFPKYPVEPFT	ACE-inhibitory
		Antioxidant
	QSKVLPVPQKAVPYQPQ	Antimicrobial
		Antioxidant
	SQSKVLPVPQKAVPY	Antioxidant
	YFPFPGPIPNSLPQNIPPLT	ACE-inhibitory
	QTEDELQDKIHP	Antimicrobial
	KEAM(+15.99)APKHKEM(+15.99)PFPKYPVEPFTESQ SLTL	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing
		Opioid
		increases mMuc4 expression
		increase small intestinal goblet cell density
		Increase MUC2 expression
	QTPVVVPPFLQPEVM(+15.99)G	Antioxidant
	ENLHPLPL	ACE-inhibitory
		Antimicrobial
	YFPFPGPIPNSLPQ	Antimicrobial
		ACE-inhibitory
	NSLPQNIPPLTQTPVVVPP FLQPEVM(+15.99)GVS	ACE-inhibitory
	KEM(+15.99)PFPKYPV	ACE-inhibitory
	SLPQNIPPLT	DPP-IV Inhibitory
	QTEDELQDKIHPF	Antimicrobial
	ELNVPGEIVE	ACE-inhibitory
		Antioxidant
		Antimicrobial
	LPQNIPPLTQTPVVVPPFL QPEVM(+15.99)	ACE-inhibitory
	HQPHQPLPPTVMFPPQSVL ,	Anti-inflammatory
		ACE-inhibitory

	PPQSVL	
	NSLPQNIPPLTQTPVVVPP FLQPEVM(+15.99)	ACE-inhibitory
	ELNVPGEIVESL	Antioxidant
		Antimicrobial
	HKEM(+15.99)PFPKY	Antimicrobial
	FLLYQEPVLGPVR	Anti-inflammatory
		ACE-inhibitory
	YPVEPFTESQLTLTDV	ACE-inhibitory
	YPFPGPIPNSLPQN	ACE-inhibitory
	HQPHQPLPPTVM(+15.99)F	Anti-inflammatory
	PPQSVL, HQPHQPLPPTVMFPPQSVL S	ACE-inhibitory
	PPLTQTPVVVPPFLQPEV	ACE-inhibitory
	PFPKYPVEPFTESQLSLT	ACE-inhibitory
	IPPLTQTPVVVPPFLQ	ACE-inhibitory
	SVLSLSQSKVLPVPQK	ACE-inhibitory
	IPPLTQTPVV	ACE-inhibitory
	VYPFPGPIPNSLPQN	ACE-inhibitory
	KEM(+15.99)PFPKYPVEPF TESQLSLT	Antioxidant
	LTDVENLHLPLP	Antimicrobial
	KHKEM(+15.99)PFP	Antimicrobial
	EDELQDKIHPFAQ	Antimicrobial
	VYPFPGPIPNSLPQ	ACE-inhibitory
	PPQSVLSSQSKVLPVPQK AVP	ACE-inhibitory
	KYPVEPFTESQLTLTD	ACE-inhibitory
	LSQSKVLPVPQKAVPYQPQ	Antioxidant
	M(+15.99)HQPHQPLPPTV	Anti-inflammatory
	M(+15.99)FPPQS	ACE-inhibitory
	QPHQPLPPTVM(+15.99)FP	Anti-inflammatory
	P, QPHQPLPPTVMFPP	ACE-inhibitory
	LVYPFPGPIPNSLPQN	ACE-inhibitory
	PPLTQTPVVV	ACE-inhibitory
	LPQNIPPLTQ	DPP-IV Inhibitory
	PVLGPVRGPFP	Cytomodulatory
		ACE-inhibitory
	PPLTQTPVVVPPFL	ACE-inhibitory
	M(+15.99)HQPHQPLPPTV	Anti-inflammatory
	M(+15.99)FPPQ	ACE-inhibitory
	KKIEKFQSEEQQQTEDELQ	Promote calcium

	DKIHPF	uptake
	LVYPFPGPPIPNSLP	ACE-inhibitory
	APKHKEMPFPKYPVEPFT	Antioxidant
	SKVLPVPQKAVPYQPQRD	Antimicrobial Antioxidant
	LVYPFPGPPIPNSLPQNIPPL TQT	ACE-inhibitory
	TPVVVPPFLQ	Antimicrobial ACE-inhibitory
	TQSLVYPFPGPPIPNSLP	ACE-inhibitory
	IEKFQSEEQQQTEDELQDK I	Promote calcium uptake
	KVLPVPQKAVPYP	Antimicrobial
	KHKEM(+15.99)PFPKYPVE PFTESQ	Antioxidant
	VYPFPGPPIPNS	prolyl endopeptidase-inhibitory PEP-inhibitory DPP-IV Inhibitory ACE-inhibitory Antioxidant ACE-inhibitory anti-anxiety
	FPGPIPNSLPQNIPP	ACE-inhibitory
	HKEM(+15.99)PFPKYPVEP FT	Antioxidant
	HQPHQPLPPTVM(+15.99)F PP	Anti-inflammatory ACE-inhibitory
	SLSQS ^K VLPVPQKAVPY	Antioxidant
	RELEELNVPGEIVESLSSSE	Caseinophosphopeptide Immunomodulatory promotes calcium uptake
	ELEELNVPGEIVESLSSSEE S	Caseinophosphopeptide Immunomodulatory promotes calcium uptake
	PFPGPIPNSLPQNIPPLTQT	ACE-inhibitory
	FPGPIPNSLPQNIPPL	ACE-inhibitory
	QNIPPLTQTPVVVPPFLQP	ACE-inhibitory

	EVM(+15.99)GVSKV	
	NLHLPLPL	ACE-inhibitory
	VYPFPGPPIPNSLPQNIPPLT	ACE-inhibitory
	RDMPIQAFL	ACE-inhibitory
	IPPLTQTPVVVPPFLQP	ACE-inhibitory
	PFPKYPVEPFTESQLTL	ACE-inhibitory
	FPGPIPNSLPQNIPPLTQ	ACE-inhibitory
	SWMHQPHQPLPPT	Antioxidant Anti-inflammatory ACE-inhibitory
	QRDMPIQAFL	ACE-inhibitory
	AMAPKHK	Antimicrobial
	VVVPPFLQP	Antimicrobial ACE-inhibitory
	WMHQPHQPLPPT	Antioxidant Anti-inflammatory ACE-inhibitory
	M(+15.99)HQPHQPLPPTV	Anti-inflammatory
	M(+15.99)FPPQSQL	ACE-inhibitory
	SLVYPFPGPIPNSLPQNIPP	ACE-inhibitory
	SKVKEAM(+15.99)APKHK EMPFPKYPVEPFTERQ, SKVKEAM(+15.99)APKHK EM(+15.99)PFPKYPVEPFT ERQ, SKVKEAMAPKHKEMPFP KYPVEPFTERQ	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing Opioid increases mMuc4 expression increase small intestinal goblet cell density Increase MUC2 expression
	YPFPGPPIHN	DPP-IV Inhibitory ACE-inhibitory Antioxidant anti-anxiety
	VYPFPGPPIHN	prolyl endopeptidase-inhibito ry

			PEP-inhibitory
			prolyl endopeptidase-inhibitory
			DPP-IV Inhibitory
			ACE-inhibitory
			Antioxidant
			anti-anxiety
		GVSKVKEAM(+15.99)APK HKEM(+15.99)PFPKYPVEP FTERQ	protective effects in indomethacin-induced enteritis through preservation of goblet cells and improvement in wound healing
			Opioid
			increases mMuc4 expression
			increase small intestinal goblet cell density
			Increase MUC2 expression
	LVYPFPGPIHN		Antioxidant
			ACE-inhibitory
		YPFPGPIH	satiety
			reduces pancreas MDA level
			Opioid
			Increases MUC5A expression
			Increases MUC3 expression
			Increases MUC2 expression
			Increases jejunal mucus secretion
			immunomodulatory
			Anxiolytic
			Anticancer
			ACE-inhibitory
			Antioxidant

			prolyl endopeptidase-inhibitory
			PEP-inhibitory
			Antioxidant
		SLVYPFPGPPIHNSLPQ	ACE-inhibitory
		HNSLPQNIPPLTQTPVVVP PFLQPEV	ACE-inhibitory
		FPGPIHN	DPP-IV Inhibitory
		HNSLPQNIPPLTQTPVVVP PFLQPEVM(+15.99)GVS	ACE-inhibitory
		SLVYPFPGPPIHNSLPQN	ACE-inhibitory
		IHNSLPQNIPPLTQTPVVVP PFLQPEVM(+15.99)GVS	ACE-inhibitory
		SLVYPFPGPPIH	ACE-inhibitory
		HNSLPQNIPPLTQTPVVVP PFLQPEVM(+15.99)G	ACE-inhibitory
		YFPFGPIHNSLPQNIPP	ACE-inhibitory
		VYPFPGPPIH	prolyl endopeptidase-inhibitory
			PEP-inhibitory
			Antioxidant
			ACE-inhibitory
		HNSLPQNIPPLTQTPVVVP PFLQPEVM(+15.99)	ACE-inhibitory
		IHNSLPQNIPPLTQTPVVVP PFLQPEV	ACE-inhibitory
		YFPFGPIHNSLPQNI	ACE-inhibitory
P02668;A0A140 T8A9	CSN3	NQFLPYYPYYAKPAAV	Antioxidant
		NNQFLPYYPYYAKPAA	Antioxidant
		YQQKPVA	Antimicrobial
			ACE-inhibitory
		NQFLPYYPYYAKPA	Antioxidant
		SDKIAKY	Antimicrobial
			ACE-inhibitory
		NQFLPYYPYYAKPAA	Antioxidant
		NYYQQKPVA	Antimicrobial
		ALINNQFLPYYPYYAKPAA	Antioxidant
		LSRYPSY	Opioid
		NNQFLPYYPYYAKPA	Antioxidant
		YYQQKPVA	Antimicrobial
		INNQFLPYYPYYAKPA	Antioxidant

		ARHPHPLSF	ACE-inhibitory Osteoanabolic Antioxidant
		NQFLPYPPYYAKP	Antioxidant
		INNQFLPYPPYYAKPAA	Antioxidant
		LINNQFLPYPPYYAKPAAV	Antioxidant
		AKYIPIQYV	Antioxidant
		QFLPYPPYYAKPAAV	Antioxidant
		PHPHPLS	ACE-inhibitory Osteoanabolic
		FFSDKIA	Antimicrobial ACE-inhibitory
		NNQFLPYPPYYAKP	Antioxidant
		IPPKKNQDKTEIPTINTI	Antimicrobial
		YIPIQYV	ACE-inhibitory
		ARHPHPLS	Antioxidant
		NNQFLPYPPYYAKPAAV	Antioxidant
		NQFLPYPPYYAKPAAVR	Antioxidant
		INNQFLPYPPYYAKP	Antioxidant
		NNQFLPYPPYYAKPAAVR	Antioxidant
		ALINNQFLPYP	DPP-IV Inhibitory
		INNQFLPYP	DPP-IV Inhibitory
		RPHPHLS	ACE-inhibitory Osteoanabolic Antioxidant
		TMARHPHPLS, TM(+15.99)ARHPHPLS	Antioxidant
		YYQQKPV	Antimicrobial
		IAKYIPIQYV	Antioxidant
		INNQFLPYPPYYAKPAAV	Antioxidant
		KDERFF	ACE-inhibitory
		IPPKKNQDKTEIPTINT	Antimicrobial
		LINNQFLPYPPYYAKPA	Antioxidant
		PPKKNQDKTEIPTINTI	Antimicrobial
		NYYQQKPV	Antimicrobial
		SRYPSYGLNY	Opioid
		IPPKKNQDKTEIPTIN	Antimicrobial
		INNQFLPYPPYYAKPAAVR	Antioxidant
		KYIPIQYV	Antioxidant
		QFLPYPPYYAKPAA	Antioxidant
		EKDERFF	ACE-inhibitory
		YQQKPVAL	Antimicrobial
		QFLPYPPYYAKPAAVR	Antioxidant

	LINNQFLPYPYYAKP	Antioxidant
	AIPPKKNQDKTEIPTINT	Antimicrobial
	LINNQFLPYPYYAKPAA	Antioxidant
	PPKKNQDKTEIPTINT	Antimicrobial
	KPAAVRSPAQIL	Antimicrobial
	TM(+15.99)ARHPHPLSF, TMARHPHPLSF	Antioxidant
	KPAAVRSPAQI	Antimicrobial
	ALINNQFLPYPYYAKP	Antioxidant
	AVRSPAQILQWQV	Antioxidant
	TVATLEDS(+79.97)PEVIES PPEINT	Antimicrobial
	HPHPHLSF	ACE-inhibitory
		Osteoanabolic
		Antioxidant
	RYPSYGLNY	Opioid
	IPPKNQDKT	ACE-inhibitory
		ameliorates insulin resistance
	TVATLEDS(+79.97)PEVIES PPEINTV	Antimicrobial
	ALINNQFLPYPYYAKPA	Antioxidant
	VRSPAQILQWQ	Antioxidant
	NQFLPYPPYYA	DPP-IV Inhibitory
	INNQFLPYPPY	DPP-IV Inhibitory
	VLSRYPS	ACE-inhibitory
	RSPAQILQWQ	Antioxidant
	IPPKNQD	ACE-inhibitory
	PPKKNQDKTEIPTINTIA	Antimicrobial
	AVRSPAQILQWQ	Antimicrobial
		Antioxidant
	AVRSPAQILQ	Antimicrobial
		Antioxidant
	M(+15.99)AIPPKKNQDKTE IPTINT, MAIPPKKNQDKTEIPTINT	Antimicrobial
	DERFF	ACE-inhibitory
	RHPHPLSF	ACE-inhibitory
		Osteoanabolic
		Antioxidant
	SRYPSY	Opioid
		ACE-inhibitory
	M(+15.99)AIPPKKNQDKTE	Antimicrobial

		IPT	
		KPAAVRSPAQILQW	Antimicrobial
		SRYPSYG	Opioid ACE-inhibitory
		CEKDERF	ACE-inhibitory
		YYQQKPVAL	Antimicrobial
		KPAAVRSPAQILQWQ	Antimicrobial Antioxidant
		VRSPAQILQWQV	Antioxidant
		IPIQYVLSRYP	Opioid C3a Receptors agonist
P02754	LGB	LIVTQTM(+15.99)K, LIVTQTMK	Cytotoxic Antimicrobial
		IDALNENK	Increase cellular growth Antimicrobial
		LIVTQTMKG, LIVTQTM(+15.99)KG	Cytotoxic
		EELKPTPEGDL	DPP-IV Inhibitory Antioxidant
		IIAEKTKIPA	Antimicrobial
		PEVDDEALEKF	DPP-IV Inhibitory Antimicrobial Antioxidant
		DISLLDAQSAPLRV	Antimicrobial
		DIQKVAGTWY	DPP-IV Inhibitory ACE-inhibitory Antimicrobial
		EVDDEALEKF	DPP-IV Inhibitory Antimicrobial
		SDISLLDAQSAPLRV	Antimicrobial
		IVTQTMKG, IVTQTM(+15.99)KG	Cytotoxic Antimicrobial
		LDIQKVAG	Antimicrobial ACE-inhibitory
		IQKVAGTWY	DPP-IV Inhibitory ACE-inhibitory
		EELKPTPEGDLE	DPP-IV Inhibitory Antimicrobial Antioxidant
		DAQSAPLRV	Antimicrobial ACE-inhibitory

	RLSFNPT	ACE-inhibitory
	LIVTQTMKGL, LIVTQTM(+15.99)KGL	Cytotoxic
	EELKPTPEGDLEIL	DPP-IV Inhibitory
	ELKPTPEGDLE	DPP-IV Inhibitory
	IIAEKTKIPAVFK	Antimicrobial
	EELKPTPEGDLEILL	DPP-IV Inhibitory
	YVEELKPTPEGDL	Antimicrobial Antioxidant
	LDAQSAPLRV	Antimicrobial ACE-inhibitory
	TPEVDDEALEKF	DPP-IV Inhibitory Antimicrobial Antioxidant
	DALNENKV	Increase cellular growth Antimicrobial
	VEELKPTPEGDL	Antimicrobial Antioxidant
	GLDIQKV	Hypocholesterolemic ACE-inhibitory
	ELKPTPEGDL	DPP-IV Inhibitory
	IDALNENKVL	Increase cellular growth Antimicrobial
	SDISLLDAQSAPLR	Antimicrobial
	AEKTKIPAVF	Antimicrobial
	GLDIQKVAG	Antimicrobial ACE-inhibitory
	EELKPTPEGD	DPP-IV Inhibitory
	RTPEVDDEALEKF, RT(+79.97)PEVDDEALEKF	DPP-IV Inhibitory Antimicrobial
	KIIAEKTKIPA	Antimicrobial
	GLDIQKVAGTWY	Antimicrobial ACE-inhibitory
	VEELKPTPEGDLEIL	DPP-IV Inhibitory Antimicrobial Antioxidant
	YVEELKPTPEGDLEIL	Hypocholesterolemic Antioxidant
	LKPTPEGDLE	DPP-IV Inhibitory
	VLDTDYK	DPP-IV Inhibitory ACE-inhibitory

		ELKPTPEGD	DPP-IV Inhibitory
		DKALKALPM(+15.99)HI	Increase cellular growth
		QSAPLRVYV	ACE-inhibitory
LKALPM(+15.99)HI			Increase cellular growth
			DPP-IV Inhibitory
			ACE-inhibitory
DAQSAPLRL			Antimicrobial
			ACE-inhibitory
	KPTPEGDLE		DPP-IV Inhibitory
IDALNENKV			Increase cellular growth
			Antimicrobial
	KPTPEGDLEILL		DPP-IV Inhibitory
	ELKPTPEGDLEIL		DPP-IV Inhibitory
PEVDDEALEKFD			DPP-IV Inhibitory
			Antimicrobial
	VEELKPTPEGDLEILL		Hypocholesterolemic
EVDDEALEK			DPP-IV Inhibitory
			Antimicrobial
YVEELKPTPEGDLE			Antimicrobial
			Antioxidant
	DISLLDAQSAPLRL		Antimicrobial
	ELKPTPEGDLEILL		DPP-IV Inhibitory
	LLDAQSAPLRV		ACE-inhibitory