

Supplementary Information

Table S1. Sequences of 114 α -lactalbumin-derived deca-peptides and their position on the arrays. Seven additional peptide sequences not derived from α -lactalbumin are shown in red font.

Position	Peptide Sequence	Position	Peptide Sequence
A1	EQLTKCEVFR	G1	PHSSNICNIS
A2	QLTKCEVFRE	G2	HSSNICNISC
A3	LTKCEVFREL	G3	SSNICNISC
A4	TKCEVFRELK	G4	SNICNISC
A5	KCEVFRELKD	G5	NICNISC
A6	CEVFRELKDL	G6	ICNISC
A7	EVFRELKDLK	G7	CNISC
A8	VFRELKDLKG	G8	NISC
A9	FRELKDLKGY	G9	ISCDKFL
A10	RELKDLKGYG	G10	SCDKFL
A11	ELKDLKGYGG	G11	CDKFL
B1	LKDLKGYGGV	H1	DKFL
B2	KDLKGYGGVS	H2	KFL
B3	DLKGYGGVSL	H3	FL
B4	LKGYS	H4	L
B5	KGYG	H5	D
B6	GYG	H6	DL
B7	YGG	H7	LT
B8	GGV	H8	LT
B9	GV	H9	T
B10	V	H10	DD
B11	S	H11	DI
C1	L	I1	IM
C2	P	I2	MC
C3	E	I3	CV
C4	W	I4	VK
C5	V	I5	KK
C6	C	I6	KI
C7	T	I7	IL
C8	T	I8	LD
C9	F	I9	DK
C10	H	I10	KV
C11	T	I11	VG
D1	S	J1	GI
D2	G	J2	IN
D3	Y	J3	NY
D4	D	J4	YW
D5	T	J5	WL
D6	Q	J6	LA

Table S1. *Cont.*

Position	Peptide Sequence	Position	Peptide Sequence
D7	AIVQNNDSTE	J7	AHKALCSEKL
D8	IVQNNDSTEY	J8	HKALCSEKLD
D9	VQNNDSTEYG	J9	KALCSEKLDQ
D10	QNNDSTEYGL	J10	ALCSEKLDQW
D11	NNDSTEYGLF	J11	LCSEKLDQWL
E1	NDSTEYGLFQ	K1	CSEKLDQWLC
E2	DSTEYGLFQI	K2	SEKLDQWLCE
E3	STEYGLFQIN	K3	EKLDQWLCEK
E4	TEYGLFQINN	K4	KLDQWLCEKL
E5	EYGLFQINN	K5	IVTQTMKGLD
E6	YGLFQINN	K6	LKPTPEGDL
E7	GLFQINN	K7	IPAVFKIDAL
E8	LFQINN	K8	HSQGTFTSDY
E9	FQINN	K9	YAEGTFISDY
E10	QINN	K10	HAEGTFTSDY
E11	INN	K11	YPSKPDNPGE
F1	NNKIWCKDDQ		
F2	NKIWCKDDQN		
F3	KIWCKDDQNP		
F4	IWCKDDQNPH		
F5	WCKDDQNPHS		
F6	CKDDQNPHSS		
F7	KDDQNPHSSN		
F8	DDQNPHSSNI		
F9	DQNPHSSNIC		
F10	QNP		
F11	NP		

Table S2. Characteristics of the seven non- α -lactalbumin-derived deca-peptides included on the arrays. β -lg, beta-lactoglobulin; GIP, glucose-dependent insulintropic polypeptide; GLP-1, glucagon-like peptide-1; NPY, neuropeptide Y.

Sequence	Origin	Reported Relationship to DPP-IV	Reference
IVTQTMKGLD	β -lg ₍₂₋₁₁₎	Weak inhibitor	[15]
LKPTPEGDL	β -lg ₍₄₆₋₅₅₎	Unknown. The ennea- and dodeca-peptides LKPTPEGDL and LKPTPEGDLIL are inhibitors	[15]
IPAVFKIDAL	β -lg ₍₇₈₋₈₇₎	Unknown. The ennea-peptide IPAVFKIDA is an inhibitor	[15]
HSQGTFTSDY	Glucagon ₍₁₋₁₀₎	Inhibitor	[27]
YAEGTFISDY	GIP ₍₁₋₁₀₎	N-terminal of natural substrate	[30]
HAEGTFTSDY	GLP-1 ₍₁₋₁₀₎	N-terminal of natural substrate	[30]
YPSKPDNPGE	NPY ₍₁₋₁₀₎	N-terminal of natural substrate	[30]