

**Supplementary Table 1.** Peptides identified by Ultra Performance Liquid Chromatography coupled to a high-resolution Mass Spectrometry system (UPLC/MS Vlon). Data were processed using UNIFI software (Waters, Milford, Massachusetts, USA).

Sample	Source protein name	Fragment label	Peptide	Modifiers
F10#1	κ-casein	1:F162-169	VQVTSTAV	
F3	κ-casein	1:F106-124&	MAIPPKKNQDKTEIPTINT	Oxidation M [1]
F3	κ-casein	1:F106-124	MAIPPKKNQDKTEIPTINT	
F3	α-S1-casein	1:F1-23	RPKHPIKHQGLPQEVLENENLLRF	
F3	κ-casein	1:F162-169	VQVTSTAV	
F3	β-casein	1:F193-209	YQEPVLGPVRGPFPIIV	
PF1	κ-casein	1:F106-124&	MAIPPKKNQDKTEIPTINT	Oxidation M [1]
PF1	κ-casein	1:F106-124	MAIPPKKNQDKTEIPTINT	
PF1	κ-casein	1:F106-126	MAIPPKKNQDKTEIPTINTIA	
PF1	α-S1-casein	1:F1-23	RPKHPIKHQGLPQEVLENENLLRF	
PF1	Fibronectin	1:F577-581	TSGPV	
PF1	κ-casein	1:F162-169	VQVTSTAV	
PF1	β-casein	1:F193-209	YQEPVLGPVRGPFPIIV	
PF2	β-casein	1:F192-209	LYQEPVLGPVRGPFPIIV	
PF2	κ-casein	1:F106-124&	MAIPPKKNQDKTEIPTINT	Oxidation M [1]
PF2	κ-casein	1:F106-124	MAIPPKKNQDKTEIPTINT	
PF2	α-S1-casein	1:F1-20	RPKHPIKHQGLPQEVLENENL	
PF2	κ-casein	1:F162-169	VQVTSTAV	
PF2	β-casein	1:F193-209	YQEPVLGPVRGPFPIIV	
PF3	β-casein	1:F192-209	LYQEPVLGPVRGPFPIIV	
PF3	α-S1-casein	1:F1-23	RPKHPIKHQGLPQEVLENENLLRF	
PF3	β-casein	1:F193-209	YQEPVLGPVRGPFPIIV	
PF10	α-S1-casein	1:F24-29	FVAPFP	
PF10	α-S1-casein	1:F24-30	FVAPFPE	
PF10	α-S1-casein	1:F10-16	GLPQEV	

PF10	$\alpha$ -S1-casein	1:F10-17	GLPQEVLN	
PF10	$\beta$ -casein	1:F203-209	GPFPPIV	
PF10	$\kappa$ -casein	1:F106-123&	MAIPPKKNQDKTEIPTIN	Oxidation M [1]
PF10	$\kappa$ -casein	1:F106-126&	MAIPPKKNQDKTEIPTINTIA	Oxidation M [1]
PF10	$\alpha$ -S1-casein	1:F17-21	NENLL	
PF10	$\beta$ -casein	1:F73-96	NIPPLTQTPVVVPPFLQPEVMGVS	
PF10	$\beta$ -casein	1:F73-105&	NIPPLTQTPVVVPPFLQPEVMGVSKVKEAMAPK	Oxidation M (2) [21 30]
PF10	Fibronectin	1:F1234-1238	PEVPQ	
PF10	$\beta$ -casein	1:F63-68	PGPIP	
PF10	$\kappa$ -casein	1:F156-163	PPEINTVQ	
PF10	$\beta$ -casein	1:F85-91	PPFLQPE	
PF10	$\beta$ -casein	1:F85-96&	PPFLQPEVMGVS	Oxidation M [9]
PF10	$\beta$ -casein	1:F85-96	PPFLQPEVMGVS	
PF10	$\kappa$ -casein	1:F134-142	PTTEAVEST	
PF10	$\beta$ -casein	1:F57-61	SLVYP	
PF10	$\beta$ -casein	1:F57-63	SLVYPFP	
PF10	$\kappa$ -casein	1:F155-160	SPPEIN	
PF10	$\kappa$ -casein	1:F155-161	SPPEINT	
PF10	$\kappa$ -casein	1:F155-163	SPPEINTVQ	
PF10	Fibronectin	1:F577-581	TSGPV	
PF10	$\kappa$ -casein	1:F152-160	VIESPPEIN	
PF10	$\beta$ -casein	1:F193-209	YQEPVLGPVRGPFPIV	