

Table SI. Amino acid sequences of Pena 1 peptides evaluated.

Peptide number	Amino acids
1	vhnqlqrmqqlendl (43-57)
2	vaalnrriqleedlerseer (85-105)
3	aadesermrkvlenr (119-133)
4	rslsdeermmdalenql (133-148)
5	flaeeadrkydevarklamveadlera (153-179)
6	eskiveleeelrvvgn (187-202)
7	qklqkevdrledelvnekey (247-267)
8	elvnekeyksitde (259-273)
9	ekyksitdeldqtfelsgy (265-284)

Table SII. Protein sequence alignment of Pen a1 and Pen m1.

Pen a 1	51 qqlendldqv qesllkaniq lvekdksln aegevaaln riqlleedle
Pen m 1	51 qqlendldqv qesllkaniq lvekdksln aegevaaln riqlleedle
Consensus	qqlendldqv qesllkaniq lvekdksln aegevaaln riqlleedle
Pen a 1	101 rseerlntat tklaeasqaa desermrkvl enrslsdeer mdalenqlke
Pen m 1	101 rseerlntat tklaeasqaa desermrkvl enrslsdeer mdalenqlke
Consensus	rseerlntat tklaeasqaa desermrkvl enrslsdeer mdalenqlke
Pen a 1	151 arflaeear kydevarkla mveadlerae eraetgeski veleeeelrvv
Pen m 1	151 arflaeear kydevarkla mveadlerae eraetgeski veleeeelrvv
Consensus	arflaeear kydevarkla mveadlerae eraetgeski veleeeelrvv
Pen a 1	201 gnnlkslevs eekanqreea ykeqiktlt n klkaaeare faersvqklq
Pen m 1	201 gnnlkslevs eekanqreea ykeqiktlt n klkaaeare faersvqklq
Consensus	gnnlkslevs eekanqreea ykeqiktlt n klkaaeare faersvqklq
Pen a 1	251 kevdrledel vnekeyksi tdeldqtfse lsgy
Pen m 1	251 kevdrledel vnekeyksi tdeldqtfse lsgy
Consensus	kevdrledel vnekeyksi tdeldqtfse lsgy