Electronic Supplementary Material (ESI) for Food & Function.
This journal is © The Royal Society of Chemistry 2021

Supporting information

Figure S1. The frequency occurrence of amino acids in TM and seven stable epitope sequences

Sequence of TM was from Genebank (QHW05413.1). The epitopes were located in 19-29, 39-48, 99-109, 110-123, 153-162, 170-188 and 211-221 of TM.

Figure S2. Conservation of TM sequences across different species

A. Conservation of non-allergenic TM sequences.

B. Conservation of allergenic TM sequences.

The red lines represent the location of TM stable epitopes.

Figure S1

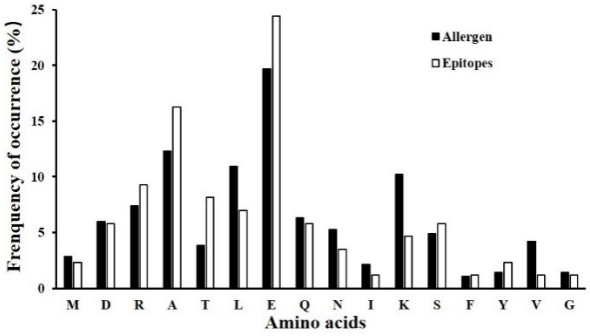
Frenquency of occurrence (%)
25
20
15
10
5
0
M D R A T L E Q N I K S F Y V G
Amino acids
Allergen
Epitopes

Figure S2

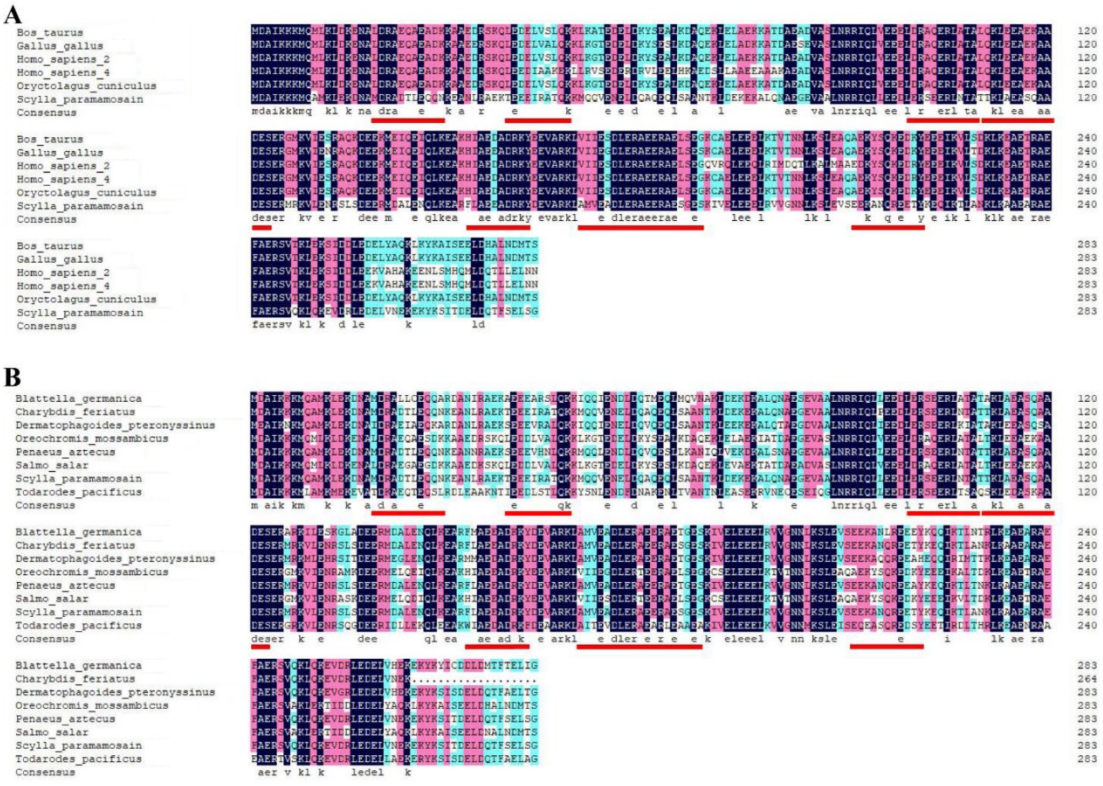
A
Bos_taurus
Gallus_gallus
Homo_sapiens_2
Homo_sapiens_4
Oryctolagus_cuniculus
Scylla_paramamosain
Consensus
B
Blattella_germanica
Charybdis_feriatus
Dermatophagoides_pteronyssinus
Oreochromis_mossambicus
Penaeus_aztecus
Salmo_salar
Scylla_paramamosain
Todarodes_pacificus
Consensus

Table S1 Specific IgE levels and symptoms of the crab sensitive individuals.

Number	Sex [a]	Symptom	Specific IgE (f23, kU_A/L)
1	M	urticaria	≥100.0
2	F	allergic dermatitis	97.3
3	F	dermatitis	78.6
4	M	anaphylactic rhinitis	32.1
5	F	eczema	23.6
6	F	pruritus	14.3
7	M	acute bronchitis	9.3
8	M	urticaria	7.4
9	F	allergic dermatitis	34.7
10	M	pruritus and nuasea	9.2
11	F	- [b]	0.3
12	M	- [b]	0.2

Note: [a]-M, male; F, female. [b]- means food allergy-free.