

Supplementary Figure legends

Figure S1. Experiment protocol of crab allergy model. Mice (n=6) were randomly divided into PBS group, wtTM group, wtMLC group, mtTM group, and mtMLC group. Groups of mice was sensitized with 15 µg CT and 1 mg purified proteins by intragastric gavage administration on days 0, 7, 14, 21, 28. The mice were challenged with 10 mg proteins by intragastric gavage on day 35, which the rectal temperature were measured within 1 h.

Figure S2. IgG/IgE-binding capacity analysis of raw/steamed extracts in mud crab.

Lane M, protein marker; lane R, raw crab extracts; lane H, steamed crab extracts.

(A) The protein composition analysis of raw/steamed extracts in crab by SDS-PAGE.

(B~C) Western blot analysis of crab raw/steamed extract using the sera pool of crab sensitised patients as primary antibody.

(D~I) Western blot analysis of crab raw/steamed extract using rabbit anti-crab TM polyclonal antibody, rabbit anti-crab AK polyclonal antibody, rabbit anti-crayfish MLC polyclonal antibody, rabbit anti-crab SCP polyclonal antibody, rabbit anti-crab TIM polyclonal antibody, rabbit anti-crab FLN c polyclonal antibody as primary antibody, respectively.

Figure S3. Effects of crab heat-stable allergens and hypoallergenic derivatives on rectal temperature after challenged within 1 h of mice. ‘*’ represents significant difference ($p<0.05$).

(A) The rectal temperature of wtTM group and mtTM group.

(B) The rectal temperature of wtMLC group and mtMLC group.

Figure S4. Morphological observation of spleen tissue in mice.

Figure S5. The population of Th cells and B cells in the spleen and mesenteric lymph nodes of mice by flow cytometry.

(A) Scatter diagrams of CD3⁺CD4⁺ Th cells on spleen lymphocytes.

(B) Histograms of CD19⁺ B cells on spleen lymphocytes.

(C) Scatter diagrams of CD3⁺CD4⁺ Th cells on mesenteric lymph nodes lymphocytes.

(D) Histograms of CD19⁺ B cells on mesenteric lymph nodes lymphocytes.

Figure S1

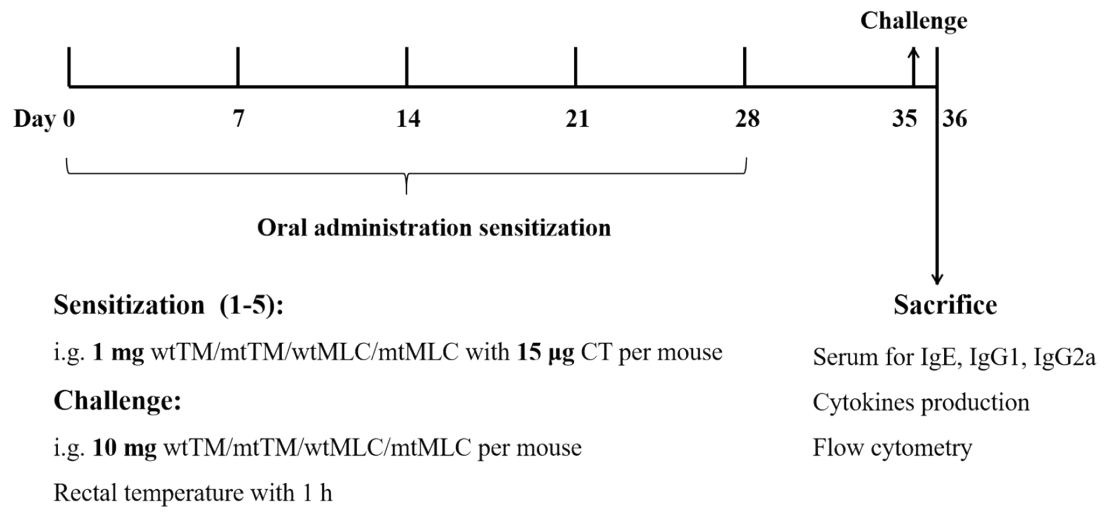


Figure S2

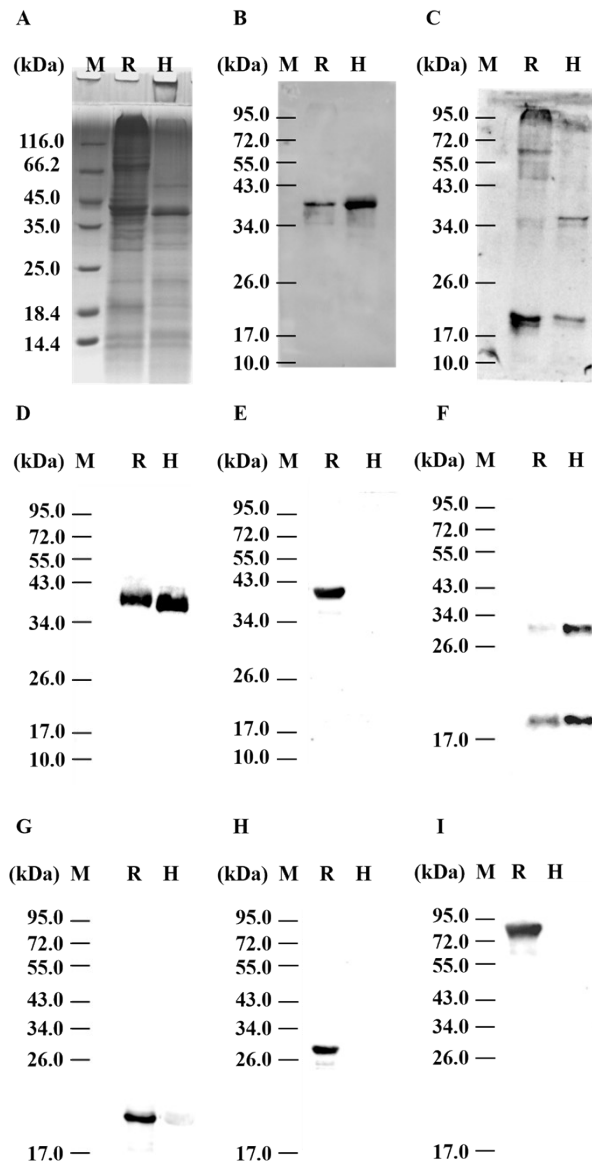


Figure S3

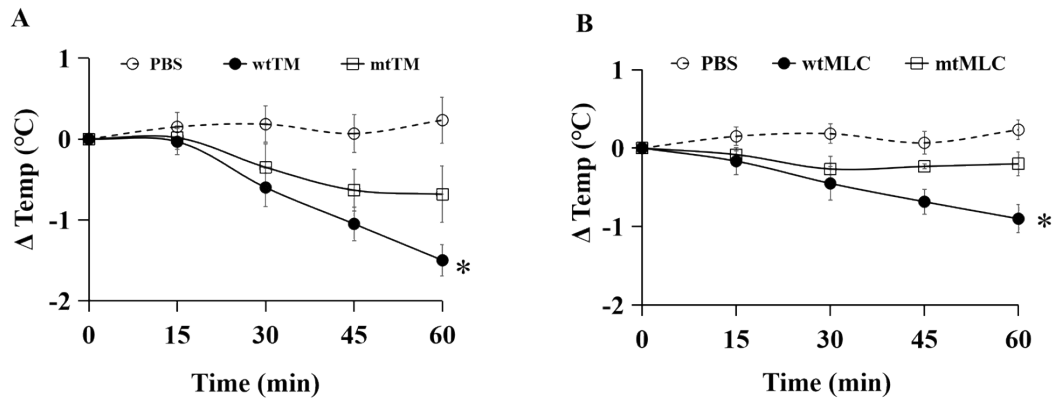
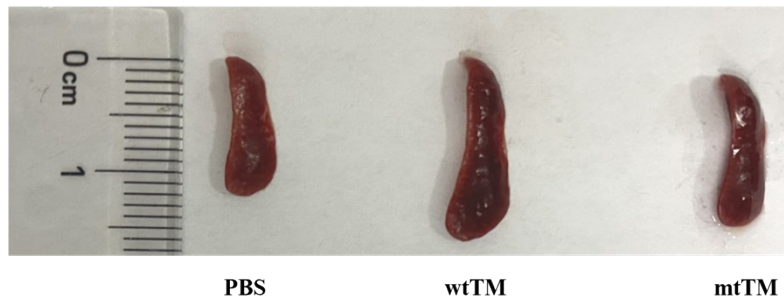


Figure S4

A



B

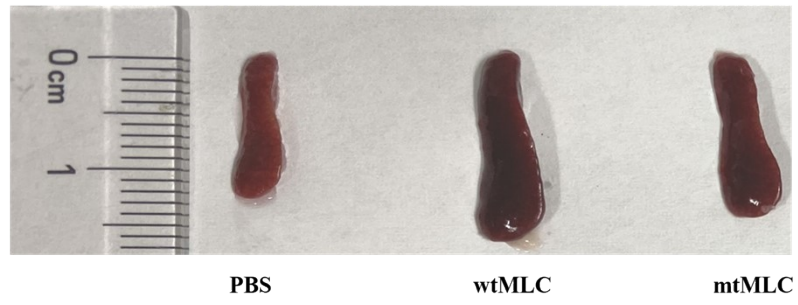


Figure S5

