Appendix S1

SUPPLEMENTAL METHOD

Direct immunofluorescence

Frozen skin sections, 5 μm thick, were fixed in ice-cold acetone for 30 min. The sections were then incubated for 15 min at 37°C with phosphate-buffered saline containing 10% bovine serum albumin for blocking. The primary antibody, mouse monoclonal anti-*Staphylococcus aureus* enterotoxin (SE) antibody (ab8309, 1:200, Abcam, Cambridge, UK) was applied for 30 min at 37°C. Subsequently, sections were incubated for 30 min at 37°C with AlexaFluor488-conjugated anti-mouse IgG2a antibody (1:100, Thermo Fisher Scientific, Waltham, MA, USA). Sections were mounted with a mounting medium of 4',6-diamino-2-phenylindole (DAPI) to visualize the nuclei. Fluorescence staining was detected using a confocal laser-scanning fluorescence microscope (FLUOVIEW FV1000, Olympus, Tokyo, Japan).