Table SI. Patient characteristics

Characteristic	NE (n = 24)	Healthy (n = 15)
Age (years), mean ± SEM (range)	51.3 ± 2.7 (27-82)	48.9 ± 2.1 (36-59)
Male	54.3 ± 2.9 (n = 12) [†]	49.0 ± 3.8 (n = 5) [†]
Female	48.2 ± 4.6 (n = 12) [†]	48.8 ± 2.7 (n = 10) [†]
Sex, Male/Female	12 / 12 [††]	5 / 10 [††]
EASI[†††], median ± SEM (range)	10.75 ± 1.8 (1.1-32)	-
Male	10.75 ± 2.1 (3.8-28.7) [†]	
Female	12.53 ± 3.0 (1.1-32) [†]	
IGA[†††], median ± SEM (range)	4 (3-5)	-
Male	4 ± 0.19 (3-5) [†]	
Female	3.5 ± 0.15 (3-4) [†]	

NE, Nummular eczema; *EASI,* Eczema area and severity index; *IGA,* Investigator's global assessment.
[†]No statistical difference between male and female groups was confirmed by student *t*-test.
[††]No statistical difference in the number of participants between the healthy control and NE groups was confirmed by χ^2 test.
[†††]Since there is no specific scoring system for NE, both EASI and IGA scoring systems were used for determination of the severity of the patients with NE.

Table SII. Information of primary antibodies for immunofluorescence staining and western blot analysis

Target molecule	Immunofluorescence staining	Western blot analysis
Anti-human CDSN	**Mouse IgG (6F11)**	**Mouse IgG (6F11)**
- Dilution factor	**1:50**	**1:2000**
- Catalog number	H00001041-M01	H00001041-M01
- Company	Abnova, Taipei, Taiwan	Abnova
Anti-human DSC1	**Rat IgG (772906)**	**Rat IgG (772906)**
- Dilution factor	**1:200**	**1:2000**
- Catalog number	MAB7367	MAB7367
- Company	R&D Systems, Minneapolis, MN, USA	R&D Systems
Anti-human DSG1	**Mouse IgG (DSG1-P23)**	**Mouse IgG (B-11)**
- Dilution factor	**1:500**	**1:2000**
- Catalog number	652110	sc-137164
- Company	ProGen, Heidelberg, Germany	Santa Cruz Biotechnology, Dallas, TX, USA
Anti-human KLK7	**Mouse IgG (H-5)**	**Mouse IgG (H-5)**
- Dilution factor	**1:100**	**1:2000**
- Catalog number	sc-514447	sc-514447
- Company	Santa Cruz Biotechnology	Santa Cruz Biotechnology
Anti-human KLK5	**Rabbit IgG (polyclonal)**	-
- Dilution factor	**1:160**	
- Catalog number	CSB-PA897100LA01HU	
- Company	Cusabio Technology LLC, Houston, TX, USA	
Anti-human LEKTI-1	**Rabbit IgG (polyclonal)**	**Mouse IgG (F-2)**
- Dilution factor	**1:100**	**1:200**
- Catalog number	CSB-PA889077LA01HU	sc-166604
- Company	Cusabio Technology LLC	Santa Cruz Biotechnology