

## Supplementary material

**Supplementary Table 1.** List of PCR primers.

Region	Mutation	Primers	Annealing temperature (°C)
RPT1	R501X 2282del4	F: 5' - AAAGGCTGGCTGAGACAG - 3' R: 5'-TGGCTCTGCTGATGGTGAC-3'	62
RPT2	3321delA	F: 5' - TCAGGCCATGGACAGGATG - 3' R: 5' - GACACAGCCTGTCCATGAG - 3'	62
RPT5	R1798X	F: 5' - GCAGACAGCTCCACAGAC - 3' R: 5' - TTACGTGTTGTCTGCTGAC - 3'	60
RPT7	S2554X R2447X	F: 5' - AAGCAGAAAAACATATGACAAG - 3' R: 5' - AAACTGGATCCCCAGTTCC - 3'	60
RPT9-10	S3247X E3429X	F: 5' - AGCTCCAGGCACTCAGTGTCA - 3' R: 5' - TCATGGTATGCGACCATGAG - 3'	64
RPT10	E3603X R3638X	F: 5' - AGCTCCAGGCACTCAGTG - 3' R: 5' - ATGGTATGCGACCATGAG - 3'	60

**Supplementary Table 2. Univariate analysis results (N=238).**

P-values refer to the univariate analysis results. In bold are reported the significant values.

\* Some missing values.

Discrete Variable		FLG mutant (%) N=30	FLG wt (%) N=208	P-value
Sex	Male	12 (40.0%)	123 (59.1%)	0.05
Symptoms intensity	Mild	9 (30.0%)	69 (33.2%)	Reference category
	Moderate	17 (56.7%)	110 (52.9%)	
	Severe	4 (13.3%)	29 (13.9%)	
Familiar history of atopy*	Yes	19 (63.3%)	128 (61.5%)	0.74
AD subtype*	IgE-associated	27 (90.0%)	174 (83.7%)	0.52
Asthma	Yes	10 (33.3%)	70 (33.7%)	0.97
RC	Yes	17 (56.7%)	119 (57.2%)	0.96
Food allergy	Mild/moderate	7 (23.3%)	55 (26.4%)	0.63
	Severe	10 (33.3%)	23 (11.1%)	0.007
Continuous Variable		Mean in FLG mutant (± SD or CI)	Mean in FLG wt (± SD or CI)	P-value
Age of AD onset		8.1 months (±12.2)	12.1 months (±19.8)	0.29
Total IgE level		204.6 kU/L (98.2-425.9)	260.9 kU/L (211.3-322.0)	0.72