Appendix A

Supplementary Table 1. Comparison of the expression levels of *LRRC32* mRNA between patients during the onset and before OFC.

Fold induction of *LRRC32* mRNA†					
	Patients with onset		Patients with OFC [b]		
	n		n		*p* value*
α-Casein	12	1.379 (0.655–2.826)	4	1.633 (0.598–3.238)	>0.1
κ-Casein	12	0.962 (0.5205–3.028)	3	1.677 (0.328–3.867)	>0.1
α-Lactalbumin	12	2.012 (1.311–3.371)	4	1.207 (0.855–1.977)	>0.1
β-Lactoglobulin	12	1.968 (1.593–2.171)	4	2.240 (1.488–2.900)	>0.1
Pmix	12	2.495 (1.270–5.098)	4	1.901 (0.721–3.290)	>0.1
CM [a]	10	2.033 (1.159–3.378)	4	1.555 (0.945–2.395)	>0.1

[a] CM, Cow milk. [b] OFC, Oral food challenge

Data are expressed as the median (interquartile ranges). *Mann–Whitney U test.

† Fold induction of *LRRC32* mRNAs was calculated by dividing the expression in the stimulated samples with that of the non-stimulated samples, following normalization to that of 18S rRNA.

Supplementary Table 2. mRNA levels in patients with FPIES and patients without FPIES.

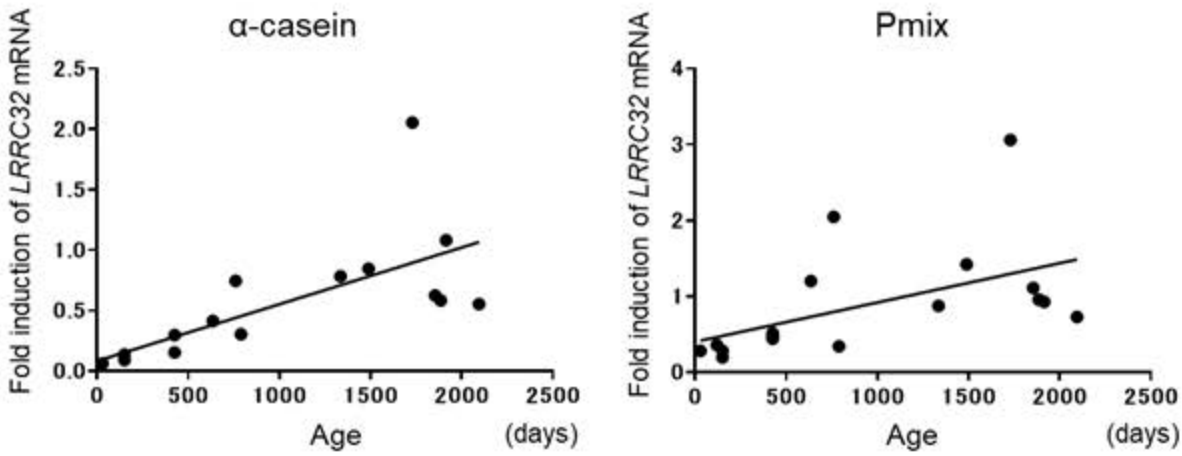
		Fold induction of mRNA†		
		Patients with FPIES [b]	Patients without FPIES	*p* value*
LRRC32	α-casein	1.865 (1.207–2.937)	0.777 (0.556–2.742)	>0.1
	κ-casein	2.020 (0.895–3.867)	0.590 (0.4153–2.617)	>0.05
	α-lactalbumin	1.763 (0.984–2.817)	1.638 (1.311–3.205)	>0.1
	β-lactoglobulin	1.987 (1.551–2.900)	1.851 (1.593–2.171)	>0.1
	Pmix	2.394 (1.536–3.438)	2.047 (0.856–5.575)	>0.1
	CM [a]	2.093 (1.373–2.455)	1.404 (0.993–3.289)	>0.1
TNFRSF4	α-casein	0.959 (0.677–1.218)	0.929 (0.714–1.279)	>0.1
	κ-casein	0.862 (0.517–0.997)	0.748 (0.502–1.024)	>0.1
	α-lactalbumin	1.678 (1.108–2.521)	1.532 (1.422–2.381)	>0.1
	β-lactoglobulin	1.851 (1.426–4.130)	1.761 (1.596–2.177)	>0.1
	Pmix	1.735 (1.072–2.658)	1.652 (1.435–2.219)	>0.1
	CM [a]	1.808 (0.896–2.229)	1.065 (0.886–1.840)	>0.1
CD69	α-casein	1.060 (0.784–1.290)	1.164 (0.850–1.255)	>0.1
	κ-casein	0.925 (0.771–1.137)	1.074 (0.703–1.125)	>0.1
	α-lactalbumin	1.328 (0.936–1.463)	1.370 (1.164–2.223)	>0.1
	β-lactoglobulin	1.353 (0.652–1.466)	1.322 (1.062–1.647)	>0.1
	Pmix	1.289 (0.873–1.394)	1.444 (1.278–2.399)	>0.1
	CM [a]	1.140 (0.920–1.332)	1.341 (0.775–1.505)	>0.1

Supplementary Table 3. mRNA levels in the patients with FPIES and patients with FPIAP.

		Fold induction of mRNA†		
		Patients with FPIES [b]	Patients with FPIAP [c]	*p* value*
LRRC32	α-casein	1.865 (1.207–2.937)	0.697 (0.641–1.558)	>0.1
	κ-casein	2.020 (0.895–3.867)	0.729 (0.434–1.028)	>0.05
	α-lactalbumin	1.763 (0.984–2.817)	2.303 (1.266–3.505)	>0.1
	β-lactoglobulin	1.987 (1.551–2.900)	1.556 (1.187–2.226)	>0.1
	Pmix	2.394 (1.536–3.438)	2.325 (1.197–5.812)	>0.1
	CM [a]	2.093 (1.373–2.455)	1.649 (1.100–2.198)	>0.1
TNFRSF4	α-casein	0.959 (0.677–1.218)	0.862 (0.683–1.015)	>0.1
	κ-casein	0.862 (0.517–0.997)	0.759 (0.410–0.888)	>0.1
	α-lactalbumin	1.678 (1.108–2.521)	1.587 (1.351–2.357)	>0.1
	β-lactoglobulin	1.851 (1.426–4.130)	1.874 (1.541–2.274)	>0.1
	Pmix	1.735 (1.072–2.658)	1.762 (1.478–2.095)	>0.1
	CM [a]	1.808 (0.896–2.229)	1.190 (0.970–1.410)	>0.1
CD69	α-casein	1.060 (0.784–1.290)	1.053 (0.850–1.255)	>0.1
	κ-casein	0.925 (0.771–1.137)	0.925 (0.750–1.099)	>0.1
	α-lactalbumin	1.328 (0.936–1.463)	1.969 (1.370–3.153)	>0.1
	β-lactoglobulin	1.353 (0.652–1.466)	2.027 (1.201–2.853)	>0.1
	Pmix	1.289 (0.873–1.394)	2.116 (1.330–2.902)	>0.1
	CM [a]	1.140 (0.920–1.332)	1.246 (0.805–1.686)	>0.1

[a] CM, Cow milk. [b] FPIES, Food protein-induced enterocolitis syndrome. [c] FPIAP, food protein-induced allergic proctocolitis. Data are expressed as the median (interquartile ranges). *Mann–Whitney U test. † Fold induction of *LRRC32*, *TNFRSF4*, and *CD69* mRNAs was calculated by dividing the expression in the stimulated samples with that of the non-stimulated samples, following normalization to that of 18S rRNA.

a



b

	n	r	*p* value
α-casein	16	0.8133	**<0.001**
κ-casein	17	0.8039	**<0.001**
α-lactalbumin	17	-0.2053	>0.1
β-lactoglobulin	17	-0.1684	>0.1
Pmix	17	0.6550	**<0.005**
Cow milk	16	0.5221	**<0.05**

Supplementary Fig. 1 Spearman correlation analysis of *LRRC32* mRNA levels and age in controls after α-casein and Pmix stimulation.

A, Spearman correlation analysis of LRRC32 levels and age after α-casein and Pmix stimulation.

B, Summary of Spearman correlations.