SUPPLEMENTARY MATERIAL

Supplementary Figure

Figure S1. (A) Skin prick testing with different types of milk and cheese. Numbers indicate wheel and erythema size in mm: CM= cow milk, Past=pasteurized, UHT= ultrahigh temperature treatment; GM= goat milk; CC I= fresh cow cheese; CC II= hard cow cheese; SC I= hard sheep cheese; GC I= fresh goat cheese; GC II= hard goat cheese; SC II = soft sheep cheese; SM= sheep milk (pasteurized); Histamine = positive control; NaCl= negative control. (B) WB with pure CM casein incubated with sera from subject 1 and 2. (C) WB with fresh goat cheese incubated with sera from subject 1 and 2. (D) Visualization of the whole proteins in the whey and curd fractions are shown as loading controls for the WB in Fig. 1C). (E) Sequence alignment of cow, sheep and goat κ-casein (top), α-lactalbumin (middle), and β-lactoglobulin (bottom) are shown. Dashes indicate conserved amino acids between the three species.

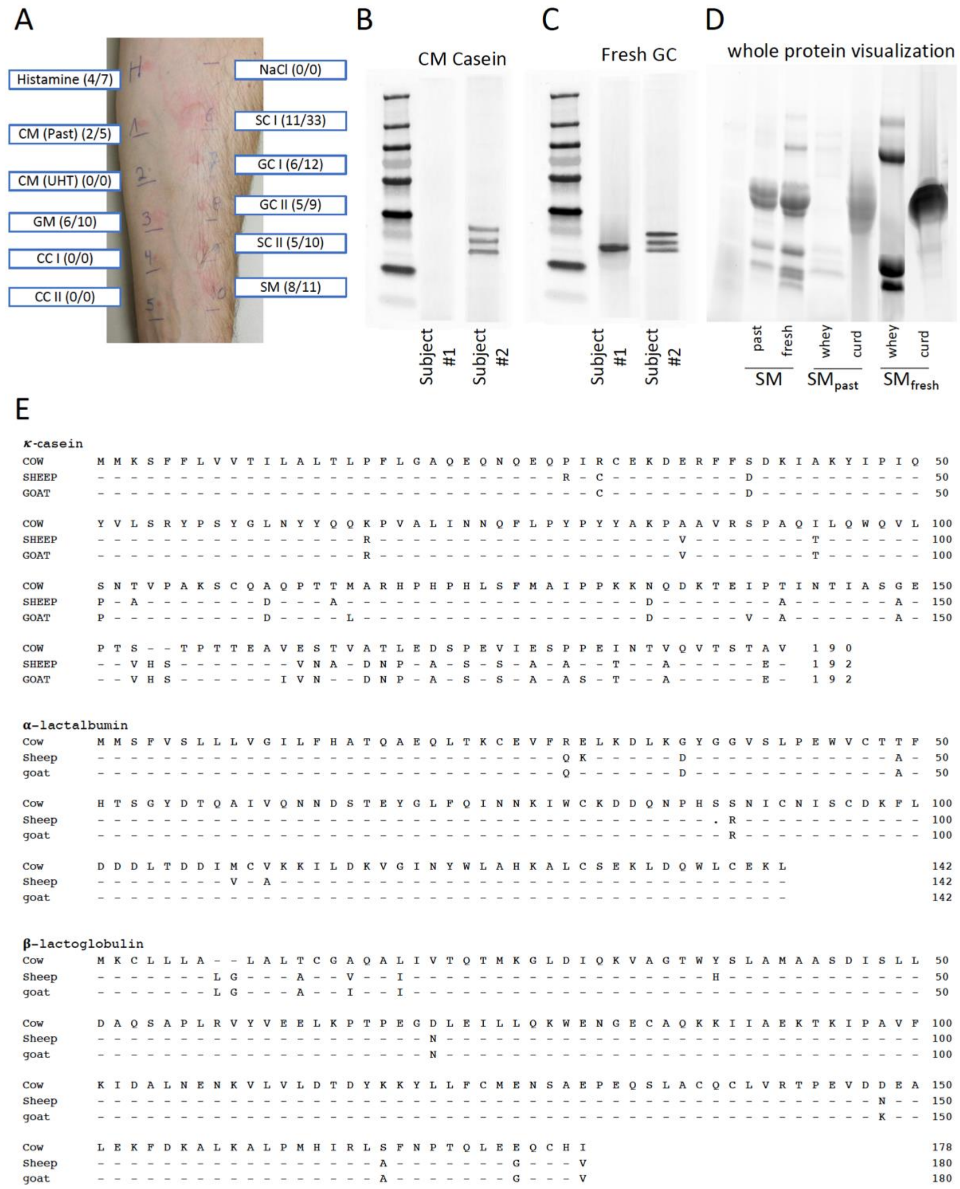
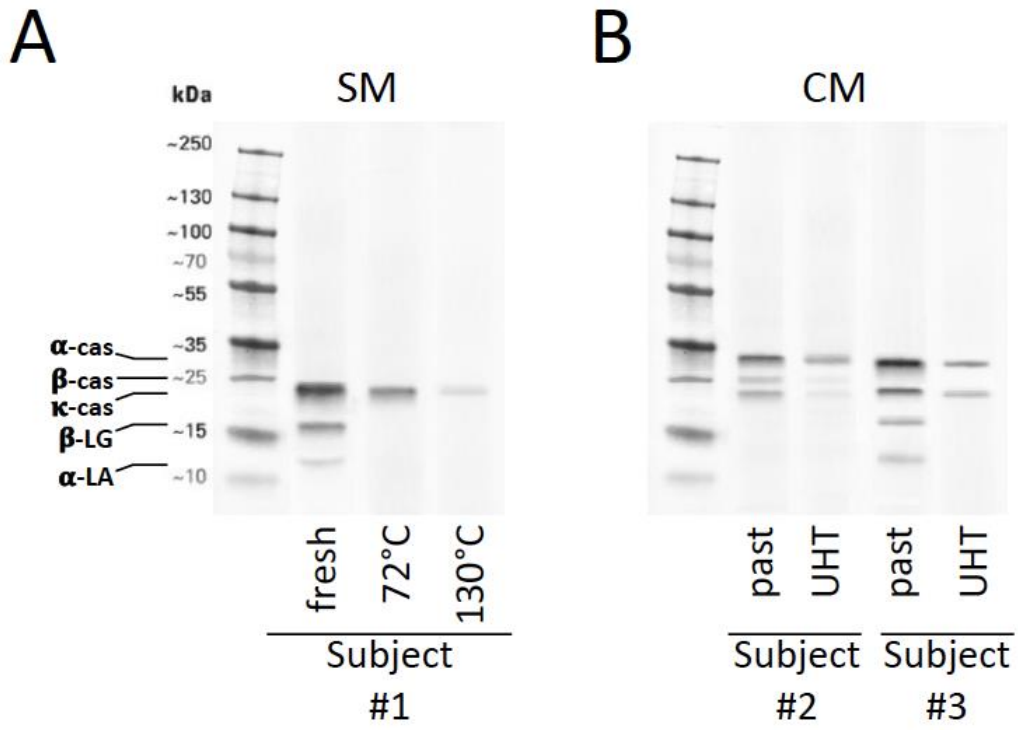


Figure S2. Effect of milk-processing temperature on IgE profiles in western blot analyses. (A) Fresh, unpasteurized sheep milk was heated to 72°C or 130°C for 15s and incubated with sera from subject #1. At 72°C, the whey protein specific IgE became undetectable (see also Figure 1C) and at 130°C the casein-specific IgE band showed substantially reduced intensity. (B) The temperature effect on the detection of IgE against casein was also observable in subjects with CM sensitization. WB using CM and sera of control subjects #2 (IgE against CM caseins) and #3 (IgE against CM caseins and whey proteins). When using UHT processed CM, the IgE against the caseins were reduced (subject #2 and #3) and the whey protein fraction became undetectable (subject #3). Western blot was performed as described in the supplementary methods using sera of subjects characterized in Table S1.



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