



Supplemental Figure 1. Co-injection of granulocytes precipitates blister induction by antibodies to type VII collagen in neonatal mice. Three doses of rabbit antibodies to type VII collagen or control antibody (10 mg/body weight/day) were given subcutaneously 24 h apart to neonatal mice. After another 24 h, 50 ng of recombinant IL-8 and C5a were administered intradermally along with the 4th dose of antibodies and, subsequently, 5×10^6 murine granulocytes were injected subcutaneously into the back of the mice. **(a)** Blister on the back of a neonate treated with pathogenic rabbit antibody to type VII collagen, but not in **(b)** a littermate injected with normal rabbit IgG (Insets show magnifications of injection sites). Histologic analysis of murine skin revealed **(c)** extensive subepidermal cleavage and a neutrophil-rich inflammatory infiltrate at the dermal-epidermal junction in the neonate injected with antibodies to type VII collagen (x200). In contrast, **(d)** a dermal and subcutaneous infiltration of neutrophils, but no significant recruitment of leukocytes at the dermal-epidermal junction and no subepidermal splits were seen in a new-born mouse treated with control antibody (x200). **(e)** Immunofluorescence analysis of lesional skin from a diseased mouse shows **(e)** rabbit IgG and **(g)** murine C3 deposits at the epidermal basement membrane, whereas in a mouse injected with control rabbit IgG, no deposits of **(f)** rabbit IgG or of **(h)** murine C3 are detected (x400).

Supplemental Table 1. EBA patients' autoantibodies show weaker binding to mouse skin than to human skin

Sera	IF microscopy ^A	
	Human skin	Murine skin
EBA 1	160	160
EBA 2	320	20
EBA 3	160	0
EBA 4	160	0
EBA 5	10	10
SA2953 ^B	160	20,480
SA2954 ^B	5,120	20,480

^ASerum reactivity to the DEJ was determined by IF microscopy using sections of non-split human and murine skin. Sera were titrated to end-point for IgG reactivity. ^BImmune rabbit serum.