

Fig. S2. Immunofluorescence antigen mapping and electron microscopy findings in cases 1 and 2. Immunofluorescence labelling for keratin 14 shows basal keratinocyte vacuolization and initial blistering in the epidermal basal layer (a) in case 1 at 7 years of age and (b) in case 2 at 2 weeks of age. Electron microscopy examination reveals reduced tonofilaments and initial  $vacuolization\ in\ basal\ keratinocytes\ in\ case\ 1\ at\ 40\ days\ of\ age\ (c,d),\ the\ reduction\ in\ tono filaments$ persists at the age of 7 years in the same patient (e); cleavage within the epidermal basal layer in case 2 (f). Bars: (a, b) 200  $\mu$ m, (c) 5  $\mu$ m, (d) 1  $\mu$ m, (e, f) 2  $\mu$ m.