

Table S1. Details of the mutations of all the Australian epidermolysis simplex (EBS) patients involved in our study

Family No.	Pat. No.	EBS subtype	Gene	Mutation (c.)	Mutation (p.)	Domain	Phenotype in previous reports
EB294	543	Gen. intermed.	KRT5	280G>A, 434T>G	G94S V145G	Head	Novel
	544	Gen. intermed.	KRT5	280G>A, 434T>G	G94S V145G	Head	Novel
	294	Gen. intermed.	KRT5	280G>A, 434T>G	G94S V145G	Head	Novel
	520	Gen. intermed.	KRT5	280G>A, 434T>G	G94S V145G	Head	Novel
	386	Gen. intermed.	KRT5	280G>A, 434T>G	G94S V145G	Head	Novel
EB411	411	Gen. severe	KRT5	449T>C	L150P	Head	Gen. intermed. (Kang et al., 2010; Oh, Lee, Kim, & Kim, 2007), Gen. severe (Bchetta et al., 2012; Minakawa et al., 2013)
EB440	440	Localised	KRT5	482T>G	I161S	Head	Localised (Y. M. Chan, Yu, Fine, & Fuchs, 1993; Ehrlrich, Sybert, Spencer, & Stephens, 1995; Pfendner et al., 1995; Pfendner et al., 2003)
	519	Localised	KRT5	482T>G	I161S	Head	Localised (Y. M. Chan et al., 1993; Ehrlrich et al., 1995; Pfendner et al., 2003)
EB330	339	Localised	KRT5	502G>C	E168Q	Head	Novel
	330	Localised	KRT5	502G>C	E168Q	Head	Novel
	567	Localised	KRT5	502G>C	E168Q	Head	Novel
EB70	70	Gen. severe	KRT5	514A>T	I172F	IA	Gen. intermed (Stephens et al., 1995)
EB30	8	Gen. intermed.	KRT5	519G>C	K173N	IA	Gen. intermed (Stephens et al., 1995)
	273	Gen. intermed.	KRT5	519G>C	K173N	IA	Gen. intermed (Stephens et al., 1995)
EB534	30	Gen. intermed.	KRT5	519G>C	K173N	IA	Gen. intermed (Stephens et al., 1995)
	553	Localised	KRT5	535T>C	F179L	IA	Novel
	534	Localised	KRT5	535T>C	F179L	IA	Novel
EB74	74	Gen. intermed.	KRT5	548T>A	I183N	IA	Novel
EB344	344	Localised	KRT5	968T>C	V232A	I12	Gen. intermed (Galilgan et al., 1998)
EB459	459	Localised	KRT5	968T>C	V232A	I12	Gen. intermed (Galilgan et al., 1998)
	460	Localised	KRT5	968T>C	V232A	I12	Gen. intermed (Galilgan et al., 1998)
EB28	28	Gen. severe	KRT5	1285_1299del15	DELTA RNKLA 429-433	2B	Gen. severe (Kemp et al., 2005)
EB35	331	Localised	KRT5	1401C>G	1467M	2B	Gen. intermed (Bolling et al., 2011; Pfendner et al., 2005)
	289	Localised	KRT5	1401C>G	1467M	2B	Gen. intermed (Bolling et al., 2011; Pfendner et al., 2005)
	300	Localised	KRT5	1401C>G	1467M	2B	Gen. intermed (Bolling et al., 2011; Pfendner et al., 2005)
	332	Localised	KRT5	1427G>C	G476D	2B	Localised (Abu et al., 2006; Bolling, Lemmink, Jansen, & Jonkman, 2011; Kowalewski et al., 2007)
EB286	286	Gen. intermed.	KRT5	1429G>A	E477K	2B	Gen. severe (Ahn et al., 2010; Garcia et al., 2011; Jerabkova et al., 2010; Kang, Lee, Kim, Oh, & Sadowski, & Utito, 2005; Stephens et al., 1997)
EB256	256	Gen. severe	KRT5	1429G>A	E477K	2B	Gen. severe (Ahn et al., 2010; Garcia et al., 2011; Jerabkova et al., 2010; Kang, Lee, Kim, Oh, & Sadowski, & Utito, 2005; Stephens et al., 1997)
EB266	266	Gen. severe	KRT5	1429G>A	E477K	2B	Gen. intermed. (Shinkuma et al., 2013)
EB26	26	Gen. severe	KRT14, KRT5	1237G>A, 504G>C	A413T, E168D	2B, 1A	Gen. intermed. (Shinkuma et al., 2013)
	557	Gen. severe	KRT14, KRT5	1237G>A, 504G>C	A413T, E168D	2B, 1A	Gen. intermed. (Shinkuma et al., 2013)
	27	Gen. severe	KRT14, KRT5	1237G>A, 504G>C	A413T, E168D	2B, 1A	Gen. intermed. (Shinkuma et al., 2013)
EB233	233	Gen. intermed.	KRT14, KRT5	1237G>A, 597G>C	M294T	2A	Gen. intermed. (Deng et al., 2011)
EB361	361	Localised	KRT14	881T>C	M294T	Head	Novel (Digenic)
			KRT5	464T>C	L155P	Head	Gen. intermed. (Cummins et al., 2001; Localised (Yasukawa et al., 1995; Hut et al., 2000; Ning et al., 2001; Pfendner et al., 2002; Rugg et al., 2000; Sasaki et al., 1999; Stephens et al., 1993; Umeki et al., 1996))
EB54	92	Gen. intermed.	KRT14	355A>G	M119V	IA	Gen. intermed. (Cummins et al., 2001; Localised (Yasukawa et al., 1995; Hut et al., 2000; Ning et al., 2001; Pfendner et al., 2002; Rugg et al., 2000; Sasaki et al., 1999; Stephens et al., 1993; Umeki et al., 1996))
	57	Gen. intermed.	KRT14	355A>G	M119V	IA	Gen. intermed. (Cummins et al., 2001; Localised (Yasukawa et al., 1995; Hut et al., 2000; Ning et al., 2001; Pfendner et al., 2002; Rugg et al., 2000; Sasaki et al., 1999; Stephens et al., 1993; Umeki et al., 1996))
	54	Gen. intermed.	KRT14	355A>G	M119V	IA	Gen. intermed. (Cummins et al., 2001; Localised (Yasukawa et al., 1995; Hut et al., 2000; Ning et al., 2001; Pfendner et al., 2002; Rugg et al., 2000; Sasaki et al., 1999; Stephens et al., 1993; Umeki et al., 1996))
	93	Gen. intermed.	KRT14	356T>C	M119T	IA	Gen. severe (Cummins et al., 2001; Jerabkova et al., 2010; Shemanko et al., 2000; Titeux et al., 2006), Mottled Pigmentation (Harel, Bergman, Indelman, & Sprecher, 2006)
EB204	204	Gen. severe	KRT14	365T>C	L122P	1A	Novel
	394	Gen. severe	KRT14	368A>T	N123I	1A	Gen. severe (Chen et al., 1995; Coulombe et al., 1991; Hachisuka et al., 1995; Hut et al., 2000; Ning et al., 2001; Pfendner et al., 2002; Rugg et al., 2000; Sasaki et al., 1999; Stephens et al., 1993; Umeki et al., 1996))
EB307	307	Gen. severe	KRT14	373C>T	R125C	1A	Gen. severe (Chen et al., 1995; Coulombe et al., 1991; Hachisuka et al., 1995; Hut et al., 2000; Ning et al., 2001; Pfendner et al., 2002; Rugg et al., 2000; Sasaki et al., 1999; Stephens et al., 1993; Umeki et al., 1996))
EB37	37	Gen. severe	KRT14	373C>T	R125C	1A	Gen. severe (Chen et al., 1995; Coulombe et al., 1991; Hachisuka et al., 1995; Hut et al., 2000; Ning et al., 2001; Pfendner et al., 2002; Rugg et al., 2000; Sasaki et al., 1999; Stephens et al., 1993; Umeki et al., 1996))
EB289	289	Gen. severe	KRT14	373C>T	R125C	1A	Gen. severe (Chen et al., 1995; Coulombe et al., 1991; Hachisuka et al., 1995; Hut et al., 2000; Ning et al., 2001; Pfendner et al., 2002; Rugg et al., 2000; Sasaki et al., 1999; Stephens et al., 1993; Umeki et al., 1996))
EB312	312	Gen. severe	KRT14	373C>T	R125C	1A	Gen. severe (Chen et al., 1995; Coulombe et al., 1991; Hachisuka et al., 1995; Hut et al., 2000; Ning et al., 2001; Pfendner et al., 2002; Rugg et al., 2000; Sasaki et al., 1999; Stephens et al., 1993; Umeki et al., 1996))

EB420	420	Gen. severe	KRT14	373C>T	R125C	1A	Gen. severe (Chen et al., 1995; Coulombe et al., 1991; Hashisuka et al., 1995; Hut et al., 2000; Ning et al., 2001; Pfendner et al., 2003; Premaratne et al., 1993; Stephens et al., 1995; Umeki et al., 1999; Stephens et al., 1993; Umeki et al., 1996)
EB63	63	Gen. severe	KRT14	373C>T	R125C	1A	Gen. severe (Chen et al., 1995; Coulombe et al., 1991; Hashisuka et al., 1995; Hut et al., 2000; Ning et al., 2001; Pfendner et al., 2003; Premaratne et al., 1993; Stephens et al., 1995; Umeki et al., 1999; Stephens et al., 1993; Umeki et al., 1996)
	64	Gen. severe	KRT14	373C>T	R125C	1A	Gen. severe (Chen et al., 1995; Coulombe et al., 1991; Hashisuka et al., 1995; Hut et al., 2000; Ning et al., 2001; Pfendner et al., 2003; Premaratne et al., 1993; Stephens et al., 1995; Umeki et al., 1999; Stephens et al., 1993; Umeki et al., 1996)
EB87	87	Gen. severe	KRT14	373C>T	R125C	1A	Gen. severe (Chen et al., 1995; Coulombe et al., 1991; Hashisuka et al., 1995; Hut et al., 2000; Ning et al., 2001; Pfendner et al., 2003; Premaratne et al., 1993; Stephens et al., 1995; Umeki et al., 1999; Stephens et al., 1993; Umeki et al., 1996)
EB282	282	Gen. severe	KRT14	374G>A	R125H	1A	Gen. severe (Arin et al., 2010; Cubotaru et al., 2003; Coulombe et al., 1991; Frangou et al., 2006; Horn & Tidman, 2000; Hut et al., 2000; Jerabkova et al., 2000; Muller et al., 2006; Rugg et al., 2007; Shemanko et al., 2000; Stephens et al., 1993; Wu & Xiao, 2009; Yasukawa et al., 2006), Localised (Minakawa et al., 2013)
	285	Gen. severe	KRT14	374G>A	R125H	1A	Gen. severe (Arin et al., 2010; Cubotaru et al., 2003; Coulombe et al., 1991; Frangou et al., 2006; Horn & Tidman, 2000; Hut et al., 2000; Jerabkova et al., 2000; Kang et al., 2010; Muller et al., 2006; Rugg et al., 2007; Shemanko et al., 2000; Stephens et al., 1993; Wu & Xiao, 2009; Yasukawa et al., 2006), Localised (Minakawa et al., 2013)
	283	Gen. severe	KRT14	374G>A	R125H	1A	Gen. severe (Arin et al., 2010; Cubotaru et al., 2003; Coulombe et al., 1991; Frangou et al., 2006; Horn & Tidman, 2000; Hut et al., 2000; Jerabkova et al., 2000; Kang et al., 2010; Muller et al., 2006; Rugg et al., 2007; Shemanko et al., 2000; Stephens et al., 1993; Wu & Xiao, 2009; Yasukawa et al., 2006), Localised (Minakawa et al., 2013)
EB323	323	Gen. severe	KRT14	374G>A	R125H	1A	Gen. severe (Arin et al., 2010; Cubotaru et al., 2003; Coulombe et al., 1991; Frangou et al., 2006; Horn & Tidman, 2000; Hut et al., 2000; Jerabkova et al., 2000; Kang et al., 2010; Muller et al., 2006; Rugg et al., 2007; Shemanko et al., 2000; Stephens et al., 1993; Wu & Xiao, 2009; Yasukawa et al., 2006), Localised (Minakawa et al., 2013)
						Novel	
EB516	516	Localised	KRT14	385T>C	Y129H	1A	Localised (Wood, Baty, Lane, & McLean, 2003)
EB555	555	Gen. severe	KRT14	442C>T	R148C	1A	Recessive Gen. intermed. (Y. Chan et al., 1994; Ysemides et al., 2008)
EB72	72	Recessive Gen. intermed	KRT14	612T>A	Y204X	1B	Recessive Gen. intermed. (Y. Chan et al., 1994; Ysemides et al., 2008)
EB91	91	Localised	KRT14	815T>C	M227T	L12	Gen. intermed. (Arin et al., 2010; Muller et al., 2006), Localised (Arin et al., 2010)
	272	Localised	KRT14	815T>C	M227T	L12	Gen. intermed. (Arin et al., 2010; Muller et al., 2006), Localised (Arin et al., 2010)
	279	Localised	KRT14	815T>C	M227T	L12	Gen. intermed. (Arin et al., 2010; Muller et al., 2006), Localised (Arin et al., 2010)
	94	Localised	KRT14	815T>C	M227T	L12	Gen. intermed. (Arin et al., 2010; Muller et al., 2006), Localised (Arin et al., 2010)
	280	Localised	KRT14	815T>C	M227T	L12	Gen. intermed. (Arin et al., 2010; Muller et al., 2006), Localised (Arin et al., 2010)
EB45	46	Gen. intermed.	KRT14	863G>T	R288L	2A	Gen. intermed. (Minakawa et al., 2013)
	45	Gen. intermed.	KRT14	863G>T	R288L	2A	Gen. intermed. (Minakawa et al., 2013)
EB422	422	Localised	KRT14	1237G>A	A413T	2B	Gen. intermed. (Chao et al., 2002; Minakawa et al., 2013)
	423	Localised	KRT14	1237G>A	A413T	2B	Gen. intermed. (Chao et al., 2002; Minakawa et al., 2013)
EB239	239	Localised	KRT14	1237G>A	A413T	2B	Gen. intermed. & Gen. intermed. (Wertheim-Tysarowska et al., 2015)
EB89	89	Gen. severe	KRT14	1253T>A	I418Q	2B	Novel
EB503	503	Gen. severe	KRT14, KRT14	1250_1252 del GCC, 1237G>A	R417del, A413T	2B, 2B	No mutations detected
							No mutations detected
EB314	314	Localised					No mutations detected
EB378	391	Localised					No mutations detected
	378	Localised					No mutations detected
EB20	20	Localised					No mutations detected
EB274	276	Localised					No mutations detected
	274	Localised					No mutations detected
	15/Y	Localised					No mutations detected
	260/Y	Localised					No mutations detected
	281/Y	Gen. intermed.					No mutations detected
EB22	276	Localised					No mutations detected
	274	Localised					No mutations detected
	15/Y	Localised					No mutations detected
	368/Y	Localised					No mutations detected
EB39	372/n	Localised					No mutations detected
	372/n	Localised					No mutations detected
EB89	80/n	Gen. intermed.					No mutations detected
	95/n	Gen. severe					No mutations detected
EB503	68	Gen. severe					No mutations detected

*A413T may or may not cause disease (Murrell, Trisnowati, Miyakis, & Paller, 2011).