Supplementary Table S2: (Boije et al) List of analysed genes, relative expression level[a)], fold difference, brief summary of function and references.

Gene	Embryonic age									Function	References
	E7			E12				E18			
	Level sc[a)]	FD	*p*	Level sc[a)]	FD	*p*	Level sc[a)]	FD	*p*		
ARHGEF12 (LARG)	bd			bd			bd			Vascular smooth muscle activation	(Ying, *et al*, 2006)
BMP4	0.029	1.55	0.32	0.095	1.87	0.20	0.227	1.02	0.22	Somitogenesis and patterning	(Monsoro-Burq, *et al*, 1996; Pourquie, *et al*, 1996)
COL1A2	0.026	0.86	0.45	0.506	**3.00**	**0.04**	1.839	**2.42**	**0.01**	Collagen type -I	(Merlino, *et al*, 1983; Nakata, *et al*, 1992; Retief, *et al*, 1985)
COL2A1	0.055	1.76	0.37	0.023	0.83	0.18	0.051	1.97	0.09	Collagen type -2	(Cheah, *et al*, 1985; Merlino, McKeon, de Crombrugghe, *et al*, 1983)
DCT	bd			bd			bd			Melanocyte development	(Pla, *et al*, 2004)
ETS1	0.182	**12.9**	**0.03**	0.478	**24.9**	**<0.01**	0.338	**11.5**	**<0.01**	Migration and differentiation of neural crest cells	(Fafeur, *et al*, 1997; Gao, *et al*, 2010; Kola, *et al*, 1993)
EFEMP1 (FBLN3)	0.056	4.29	0.29	0.287	3.87	0.13	0.151	0.93	0.43	Negative regulator of chondrocyte differentiation	(Wakabayashi, *et al*, 2010)
FEZF2	bd			bd			bd			Neurogenesis	(Kwan, *et al*, 2008)
FOXD3	0.0005	7.14	0.10	0.0004	0.24	0.16	0.0036	0.48	0.08	Melanocyte fate determination	(Thomas and Erickson, 2008; Tucker, 2004)
FZD1	0.039	2.15	0.27	0.069	3.61	0.15	0.108	0.84	0.30	Wnt receptor	(Hartmann and Tabin, 2000; Yu, *et al*, 2010)
GLI1	0.021	**10.1**	**0.04**	0.035	**4.01**	**<0.01**	0.052	**5.18**	**<0.01**	Hedgehog downstream signal	(Dai, *et al*, 1999; Marigo, *et al*, 1996)
GLI2	0.238	3.30	0.06	0.230	**2.69**	0.04	0.217	0.90	0.36	Hedgehog downstream signal	(Dai, Akimaru, Tanaka, *et al*, 1999; Marigo, Johnson, Vortkamp, *et al*, 1996)
HAS2	0.0036	2.48	0.38	0.0053	0.95	0.26	0.0037	1.52	0.13	Hyaluronic acid synthesis	(Itano, *et al*, 1999; Spicer, *et al*, 1997a; Spicer, *et al*, 1997b)
HAS3	bd			bd			bd			Hyaluronic acid synthesis	(Itano, Sawai, Yoshida, *et al*, 1999; Spicer, Olson and McDonald, 1997a)
IHH	0.0007	5.39	0.15	0.0017	3.52	0.08	0.0032	1.07	0.63	Indian hedgehog, morphogen	(Vortkamp, *et al*, 1996)
ITGB3	0.011	**12.9**	**0.03**	0.033	**24.4**	**<0.01**	0.041	**9.38**	**<0.01**	Integrin β3	(Lei, *et al*, 2011; Oda, *et al*, 1999; Rothhammer, *et al*, 2004)
KIT	0.002	2.03	0.11	0.001	0.43	0.30	0.004	1.81	0.06	Neural crest development	(Boissy and Nordlund, 1997)
MEOX2	bd			bd			bd			Somite formation Mesenchyme patterning and differentiation.	(Mankoo, *et al*, 2003; Reijntjes, *et al*, 2007)
MITF	0.007	1.62	0.30	0.005	0.43	0.07	0.027	1.53	0.14	Melanocytes development	(Opdecamp, *et al*, 1997)
MMP1	bd			bd			bd			Breakdown of ECM	(Klatt, *et al*, 2009)
MMP2	0.0231	0.86	0.42	0.0201	0.70	0.21	0.084	3.53	0.06	Breakdown of ECM	(Fichter, Korner, Schomburg, *et al*, 2006; Klatt, Paul-Klausch, Klinger, *et al*, 2009)
MMP13	bd			bd			bd			Breakdown of ECM	(Fichter, *et al*, 2006; Klatt, Paul-Klausch, Klinger, *et al*, 2009)
PAX3	0.014	**5.89**	**0.03**	0.001	0.35	0.07	0.0006	0.43	0.06	Neural crest migration	(Conway, *et al*, 1997)

PAX7	bd			bd			bd			Neural crest and somite development	(Rescan and Ralliere, 2010)
PLAU	0.008	2.10	0.32	0.031	**9.5**	**<0.01**	0.032	1.15	0.17	Urokinase-type plasminogen activator	(Iwasaka*, et al*, 1996; Rothhammer, Hahne, Florin*, et al*, 2004)
PTCH1	0.023	**12.0**	**0.02**	0.037	**7.66**	**0.03**	0.024	1.21	0.36	Hedgehog receptor	(Alcedo and Noll, 1997; Chen and Struhl, 1996)
RHOA	0.088	0.87	0.25	0.113	0.98	0.35	0.230	1.05	0.41	Regulation of chondrogenesis	(Woods and Beier, 2006)
RUNX2	0.671	**2.98**	**<0.01**	0.386	**6.01**	**<0.01**	0.271	**2.96**	**<0.01**	Chondrocyte and osteoblast determination and differentiation	(Komori, 2011; Zhang*, et al*, 2008)
S100B	bd			bd			bd			Inhibition of terminal differentiation of chondrocytes	(Saito*, et al*, 2007)
SHH	0.0008	4.29	0.37	0.0048	3.55	0.12	0.0028	0.73	0.23	Sonic hedgehog, Morphogen	(Currie and Ingham, 1996; Herzog*, et al*, 2003; Lewis and Eisen, 2001)
SMO	0.0427	**5.56**	**<0.01**	0.0951	**8.34**	**0.01**	0.0766	1.32	0.21	Hedgehog receptor	(Alcedo and Noll, 1997; Chen and Struhl, 1996)
SNAI2 (Slug)	0.018	2.15	0.09	0.025	0.75	0.29	0.029	0.61	0.06	Neural crest formation	(Aybar*, et al*, 2003; del Barrio and Nieto, 2002)
SNAI1 (Snail)	bd			bd			bd			Neural crest formation	(Aybar, Nieto and Mayor, 2003; del Barrio and Nieto, 2002)
SOX5	0.010	**0.44**	**<0.01**	0.002	**0.25**	**0.04**	0.007	0.81	0.15	Neural crest formation and chondrocyte differentiation	(Morales*, et al*, 2007; Perez-Alcala*, et al*, 2004; Zhang, Kong, Carlson*, et al*, 2008)
SOX6	0.008	1.05	0.46	0.003	0.41	0.11	0.004	1.29	0.19	Cartilage formation	(Ikeda*, et al*, 2005; Smits*, et al*, 2004; Smits and Lefebvre, 2003)
SOX9	0.055	3.80	0.09	0.002	0.35	0.11	0.006	0.65	0.12	Cartilage formation	(Bi*, et al*, 1999)
SOX10	0.001	0.84	0.43	0.004	1.02	0.12	0.010	0.60	0.09	Neural crest formation	(Kelsh, 2006)
SPAG6	bd			bd			bd			Sox5 downstream signal	(Kiselak*, et al*, 2010)
TWIST	bd			bd			bd			Melanocyte development	(Hoek*, et al*, 2004)
VCAN	0.026	1.75	0.15	0.201	0.69	0.201	0.038	1.78	0.17	Versican, chondrogenesis	(Shinomura*, et al*, 1993)

a) Relative qRT-PCR amplification level related to the level of ß-actin
bd; below detection. Back-ground levels were set to detection level
E; Embryonic day,
FD; fold difference = single-comb/Pea-comb expression levels
sc; single-comb
Statistical test: ANOVA *p*-value.

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