

Table S1. Comparison of phenotypes of mouse mutant cartilage

Mouse line	Maturation	Bone length	Proliferation	Chondrocyte organization	References
Conditional <i>Piga</i> × <i>Hoxb6</i>	Delay in hypertrophy	Short	RZ increased, PZ normal	Disorganized	
<i>Ext</i> ^{Gt/Gt} (hypomorph)	Delay in hypertrophy	Short	RZ increased, PZ normal	Disorganized	Koziel et al., 2004
<i>Ihh</i> ^{-/-}	Delay in hypertrophy	Short	Reduced	Disorganized	St-Jacques et al., 1999
<i>Pthrp</i> ^{-/-}	Increased hypertrophy	Short	Slightly reduced	Stacked properly?	Karp et al., 2000
<i>Ihh</i> ^{-/-} <i>Pthrp</i> [*]	Delay in hypertrophy	Short	Reduced	Disorganized?	Karp et al., 2000
<i>Ihh</i> ^{-/-} <i>Pthrp</i> ^{-/-}	Delay in hypertrophy	Short	?	Disorganized?	Karp et al., 2000
<i>Wnt5a</i> ^{-/-}	Delay in hypertrophy	Short	RZ increased, PZ decreased Reduced (binucleate cells)	Stacked properly?	Yamaguchi et al., 1999; Yang et al., 2003
β1 integrin	Delay in ossification	Short		Disorganized	Aszodi et al., 2003
<i>Rac</i> ^{fl/fl} *	Delay in differentiation	Short	Reduced	Disorganized	Wang et al., 2007 Blumbach et al., 2008;
<i>Col9a1</i> ^{-/-}	?	Short	Reduced Reduced (stated, data not shown)	Disorganized	Dreier et al., 2008
<i>Hspg2</i> ^{-/-} (perlecan)	?	Short		Disorganized	Arikawa-Hirasawa, 1999
<i>Smad6</i> [*]	Delay in hypertrophy	Short	Normal	Stacked properly	Horiki et al., 2004
<i>Gpc3</i> ^{-/+}	Delay in hypertrophy	?	Normal	?	Viviano et al., 2005

*Activated by collagen II Cre recombinase.

†Figures show high variability in phenotype.