Table S2. Comparison of phenotypes of mouse mutants that affect cell-matrix interactions

Mutant	Maturation*	Columns†	Short‡	Wide§	Proliferation	Apoptosis	Cell density	Reference
Rac1 (Rho GTPase)	Decreased¶	Reduced**	Y	N	Decreased	Y	Hypocellular†† in all zones	(Wang et al. 2007)
Ilk (integrin-linked kinase)	Normal	Reduced	Y (mild)	N	Decreased	N	Slightly reduced, some hypocellularity	(Grashoff et al. 2003; Terpstra et al. 2003)
integrin β1 (matrix receptor)	Decreased	Reduced	Y	Y	Decreased	Y	Reduced /multi-nucleate cells	(Aszodi et al. 2003)
integrin α10 (matrix receptor)	Reduced hypertrophic zone	Y	N	N	Decreased	N	Some hypocellularity	(Bengtsson et al. 2004)
Col9a1 (matrix protein)	Decreased	Reduced	Y (mild)	Y (mild)	Decreased	N.D.	Central hypocellular region	(Blumbach et al. 2008; Dreier et al. 2008)

Y, yes; N, no; N.D., not determined.
*Changes in the size of maturation zones as measured from histological sections or in situ hybridization.
†Column formation is evident in histological sections.
‡Change in the length of long bones.
§Change in the width of long bones.
¶Decreased: reduction in size or gene expression in more than one chondrocyte zone.
**Reduced: mixture of morphologically normal and abnormal proliferative chondrocytes.
††Hypocellular: regions of low cell density that are occupied by matrix proteins.

References

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