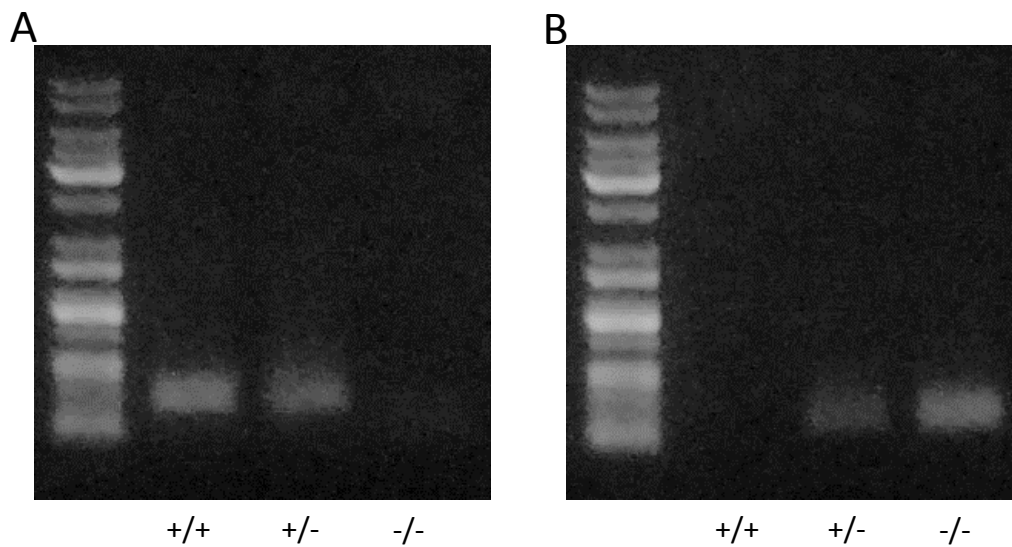


**Supplemental Figure S1. No changes in expression of ECM-related genes.**

Relative mRNA levels of five collagen genes [*collagen I $\alpha$*  (*Col1a*), *collagen II $\alpha$*  (*Col2a*), *collagen III $\alpha$*  (*Col3a*), *collagen IV $\alpha$*  (*Col4a*), *collagen XV* (*Col15*)], *decorin* (*Dcn*), and *biglycan* (*Bgn*)] are shown (means + SEM, n=6/group).



**Supplemental Figure S2. Electrophoretic patterns of genotyping PCR.**

Electrophoretic patterns of genotyping PCR for the *Chst14* gene (A) and neomycin resistance gene (B). (A) The product size of the PCR for the *Chst14* gene (exon 1) was 300 bp. Wild-type (+/+) and heterozygous (+/-) were positive. Homozygous (-/-) was negative. (B) The product size of the PCR for the neomycin resistance gene was 235 bp. Wild-type was negative. Heterozygous and homozygous were positive. Left lanes in the electrophoretic patterns contain a size marker (100–10,000 bp DNA ladder).

**Supplementary Table I. qRT-PCR primer sequences**

gene	F/R	Sequence (5'–3')
<i>18s Ribosomal RNA</i>	F	ATCATGCAGAACCCACGACA
	R	ACACGAAGGCCCCAAAAGT
<i>Carbohydrate sulfotransferase 14</i>	F	CCAAAGTGGCCTGCTCTAACTG
	R	AAGTCACTGCGGTGGTCCAT
<i>Carbohydrate sulfotransferase 11</i>	F	CCCTTCGGTGTGGACATCTG
	R	GCAGGATGGCAGTGTTGGAT
<i>Collagen I<math>\alpha</math></i>	F	ATGGATTCCCGTTCGAGTACG
	R	TCAGCTGGATAGCGACATCG
<i>Collagen II<math>\alpha</math></i>	F	TGGAAGAGATGGTGCAGCTG
	R	CAGCCTCTCCTCTGTCTCCT
<i>Collagen III<math>\alpha</math></i>	F	TGACTGTCCCACGTAAGCAC
	R	AGGAAGATCAGGAGGGCCAT
<i>Collagen IV<math>\alpha</math></i>	F	AACAACGTCTGCAACTTCGC
	R	CTTCACAAACCGCACACCTG
<i>Collagen XV</i>	F	TCATTGGTGTCCCATTACCC
	R	AAAGCTGTAAGCCGGGAAAC
<i>Biglycan</i>	F	GAGGGAACCTTCACTTGGACAAC
	R	CACCTTGGTGATGTTGTTGG
<i>Decorin</i>	F	ATCACCAAGCTGCGGAAATC
	R	AAGGCTCCGTTTTCAATCCC