

Table S1. Primer sequences used for genotyping by PCR of Chst11/C4st1^{-/-} and Chst14/D4st1^{-/-} mice and for amplification of the probes

Experiment	Mouse line or gene	Primer direction	Primer sequence
Multiplex PCR	Chst11/C4s t1	Forward	5'-TGGAGACAGCCCTCCATAGATGT-3'
		Reverse 1	5'-TGTTGGGCAATGAACTACTTAGC-3'
	Chst14/D4s t1	Reverse 2	5'-GATGGCAGTGTGGATAGCTCCA-3'
		Forward	5'-CTCCAGCCCCTGCTGCAGTCA-3'
		Reverse 1	5'-GAGGGATACACAATGTGGCATCAG-3'
		Reverse 2	5'-AGTCCCCAGCATCCAAGGATAG-3'
Southern blot probe	Chst11/C4s t1 (PX)	Forward	5'-GCCTGCCCCTCTGATTCAGACT-3'
		Reverse	5'-GATTGTGCAGGTTCTGGGTGACT-3'
	Chst11/C4s t1 (PX)	Forward	5'-GCAGCGCTTGGCATTAGGATGT-3'
		Reverse	5'-CAAGGAAGGAGCCCCTGAGAC-3'
	Chst14/D4s t1 (SP)	Forward	5'-CTGGCTTCCCAGAATACTGGTCA-3'
		Reverse	5'-CCTAGTGCCATCTTCCACAGTGT-3'
Northern blot probe	Chst11/C4s t1	Forward	5'-TGGAGCTATCCAACACTGCCATC-3'
		Reverse	5'-TCTCATCCCTGTTTCTTAGTGCAAG-3'
	Gapdh	Forward	5'-CCAGCCTCGTCCCCTAGACAAA-3'
		Reverse	5'-CATGCCAGTGAGCTTCCCCTT-3'
	Chst14/D4s t1	Forward	5'-GACCCACTATCCCTCCCCTCC-3'
		Reverse	5'-TGATCATGTGCTTGGCTAGTGTCA-3'
	Hprt	Forward	5'-GTCGTGATTAGCGATGATGAACCA-3'
		Reverse	5'-ACAAGATAAGCGACAATCTACCAGA-3'