

Table S1. Analysis of heparan sulfate levels and structure in *sfl* and *ttv* heterozygotes

	Total amount ng/mg dry tissue	Unsaturated disaccharide					
		NAc	NS	NAc6S	NS6S	2SNS	2SNS6S
		% change compared to wild type					
OreR (wild type)	12.8						
<i>slf</i> ₀₃₈₄₄ /+	10.1	-2%	-18%	-8%	-12%	-19%	6%
<i>slf</i> _{9B4} /+	10.1	-8%	-21%	-7%	-7%	-21%	-4%
<i>ttv</i> ₀₀₆₈₁ /+	7.9	-32%	-35%	-23%	-23%	-30%	-21%

Table legend. Each sample represents the average of samples containing 50 females and 50 adult males, where total heparan sulfate was purified and measured using a disaccharide profiling method described previously (Toyoda et al. 2000b). Abbreviations: **NAc** = 2-acetamido-2-deoxy-4-*O*-(4-deoxy- α -L-*threo*-hex-enepyransyluronic acid)-D-glucose (Δ UA-GlcNAc), **NS** = 2-deoxy-2-sulfamido-4-*O*-(4-deoxy- α -L-*threo*-hex-enepyransyluronic acid)-D-glucose (Δ UA-GlcNS), **NAc6S** = 2-acetamido-2-deoxy-4-*O*-(4-deoxy- α -L-*threo*-hex-enepyransyluronic acid)-6-*O*-sulfo-D-glucose (Δ UA-GlcNAc6S), **NS6S** = 2-deoxy-2-sulfamido-4-*O*-(4-deoxy-2-*O*-sulfo- α -L-*threo*-hex-enepyransyluronic acid)-6-*O*-sulfo-D-glucose (Δ UA-GlcNS6S), **2SNS** = 2-deoxy-2-sulfamido-4-*O*-(4-deoxy-2-*O*-sulfo- α -L-*threo*-hex-enepyransyluronic acid)-D-glucose (Δ UA2S-GlcNS), **2SNS6S** = 2-deoxy-2-sulfamido-4-*O*-(4-deoxy-2-*O*-sulfo- α -L-*threo*-hex-enepyransyluronic acid)-6-*O*-sulfo-D-glucose (Δ UA2S-GlcNS6S).