

**Table S3. Summary of genetic data demonstrating intrinsic (myogenic) and extrinsic (fibroblast-mediated) regulation of MyHC levels by Tcf4**

Genotype	Quadriceps			Tibialis anterior			Diaphragm		
	MyHC I	MyHC IIb	MyHC emb	MyHC I	MyHC IIb	MyHC emb	MyHC I	MyHC IIb	MyHC emb
<b>P0 Germline Tcf4 LOF</b> <i>Tcf4<sup>GFP-Cre/GFP-Cre</sup></i> versus <i>Tcf4<sup>+/+</sup></i>	0.76 ↓↓↓	—	1.76 ↑↑↑	0.67 ↓↓↓	0.34 ↓↓↓	1.34 ↑	0.48 ↓↓↓	0.71 ↓	2.11 ↑↑↑
<b>P0 Myogenic Tcf4 LOF</b> <i>Pax3<sup>Cre/+</sup>;Tcf4<sup>del/fl</sup></i> versus <i>Pax3<sup>+/+</sup>;Tcf4<sup>fl/+</sup></i>	0.63 ↓↓↓	0.66 ↓↓↓	—	0.26 ↓↓↓	0.54 ↓↓↓	—	0.43 ↓↓↓	0.32 ↓↓↓	1.79 ↑↑↑
<b>P0 Fibroblast Tcf4 LOF</b> <i>Tcf4<sup>GFP-Cre+neofl</sup></i> versus <i>Tcf4<sup>fl/+</sup></i>	0.82 ↓↓↓	—	—	0.84 ↓	0.35 ↓	—	—	0.53 ↓↓↓	2.50 ↑
<b>6 wk Fibroblast Tcf4 LOF</b> <i>Tcf4<sup>GFP-Cre+neofl</sup></i> versus <i>Tcf4<sup>+/+</sup></i>	—	—	2.30 ↑↑↑	—	1.30 ↑↑↑	1.54 ↑↑↑	—	0.36 ↓↓↓	5.13 ↑



Increase Ave MHC transcript level in mutant  $\geq 1.3$ , \* $p < 0.05$   
Ave MHC transcript level in control



Increase Ave MHC transcript level in mutant  $\geq 1.3$ ,  $.05 < p < 0.09$   
Ave MHC transcript level in control



Increase Ave MHC transcript level in mutant  $\geq 2.5$ , but  $p > 0.09$   
Ave MHC transcript level in control

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No significant change

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Ave MHC transcript level in mutant  
Ave MHC transcript level in control



Decrease Ave MHC transcript level in mutant  $\leq 0.80$ , \* $p < 0.05$   
Ave MHC transcript level in control



Decrease Ave MHC transcript level in mutant  $\leq 0.80$ ,  $.05 < p < 0.09$   
Ave MHC transcript level in control



Decrease Ave MHC transcript level in mutant  $\leq .35x$ , but  $p > 0.09$   
Ave MHC transcript level in control