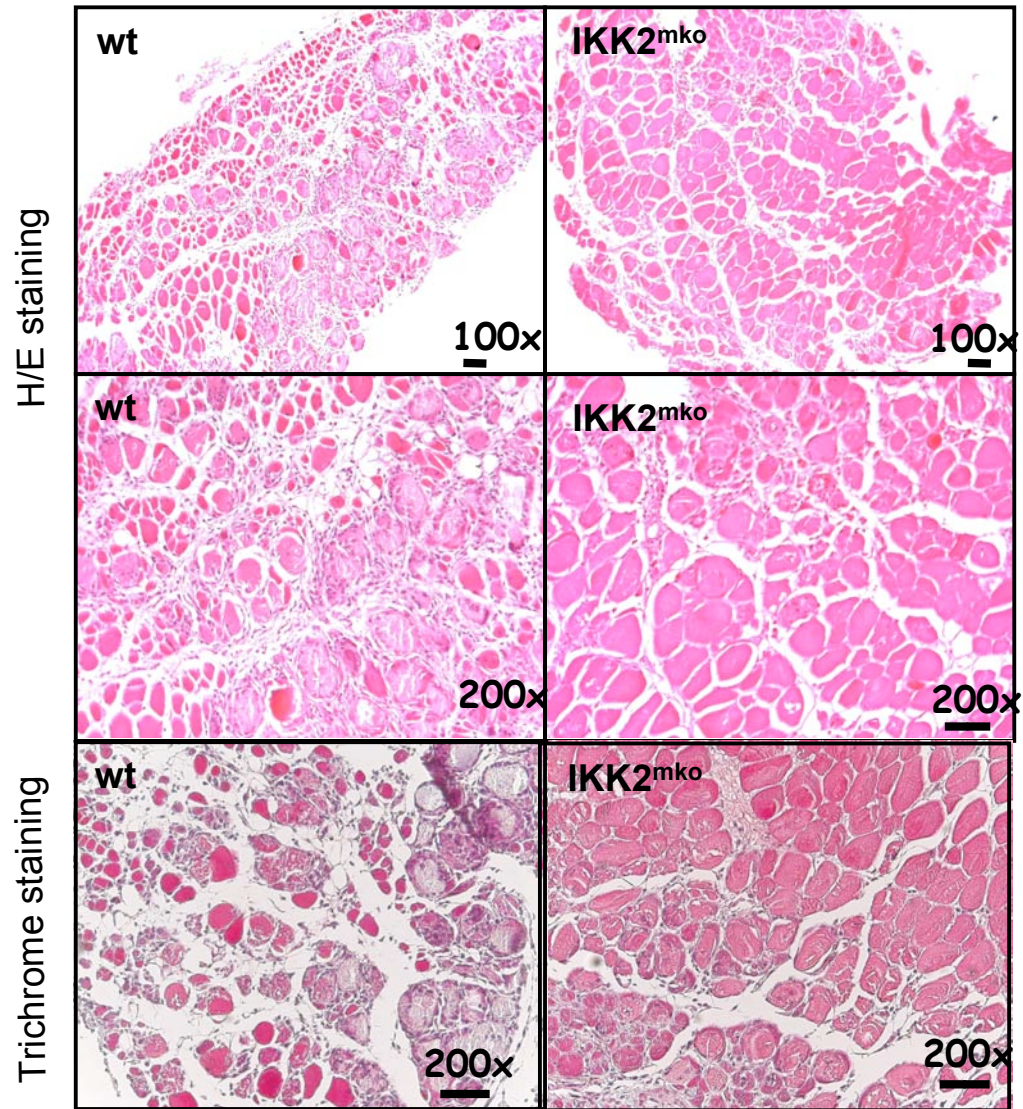




## KINEXUS

### KINETWORKS™ NORMALIZATION COMPARISON REPORT

Normalized Data Comparison Of Normalized Counts per Minute					
FULL NAME OF PROTEIN	ABBREVIATION	EPI TOPE	WT DN	IKK2 <sup>dn</sup> DN	% IKK2 <sup>dn</sup> DN/ WT DN
			NORMALIZED C.P.M.		
90 kDa Ribosomal S6 Kinases (S380)	RSK1/2	S380	294	459	56%
90 kDa Ribosomal S6 Kinases (T573)	RSK1/2	T573			
AMP-activated protein kinase alpha (T172)	AMPKa	T172			
Bone marrow X (Eph-like) kinase (Y40)	BMX (Etk)	Y40			
Bruton's tyrosine kinase (Y223)	Btk	Y223			
Calcium/calmodulin-dependent kinase II (T286)	CaMK2	T286			
Cyclin-dependent kinase I (T161)	CDK1	T161			
Cyclin-dependent kinase I (Y15)	CDK1	Y15			
eIF4E binding protein (S65) (16)	4E-BP1	S65			
eIF4E binding protein (S65) (17)	4E-BP1	S65			
eIF4E binding protein (S65) (18)	4E-BP1	S65			
Extracellular signal-regulated kinase 1 (T202/Y204)	ERK1	T202/Y204	446	226	-49%
Extracellular signal-regulated kinase 2 (T185/Y187)	ERK2	T185/Y187	749	176	-77%
Glycogen synthase kinase-3 alpha (S21)	GSK3a	S21	102	206	102%
Glycogen synthase kinase-3 beta (S9)	GSK3b	S9	38	48	26%
I-kappa-B kinase alpha (S180)	IKKa	S181			
I-kappa-B kinase beta (S181)	IKKb	S180			
Lyn (Y507) (44)	Lyn	Y507	527	509	-3%
Lyn (Y507) (46)	Lyn	Y507	234	172	-26%
MAP kinase activated protein kinase 2 (T334)	MAPKAPK2	T334			
MAP kinase interacting kinase 1 (T197/202)	Mnk1	T197/202	389	538	38%
MAPK/Erk kinase 1/2 (S217/221)	MEK1/2	S217/221	114	68	-40%
MKK3/6(1) (S189/S207)	MKK3/6	S189/S207			
MKK6(2) (S207)	MKK6	S207	261	239	-8%
p38 MAPK (T180/Y182)	p38a MAPK	T180/Y182			
p70 S6 kinase (T389)	S6Ka p70	T389			
p70 S6 kinase (T421/T424)	S6Ka p70	T421/T424	178	366	106%
p85 S6 kinase 2 (T412)	S6K2 p85	T412			
p85 S6 kinase 2 (T444/S447)	S6K2 p85	T444/S447			
Phosphoinositide-dependent protein kinase 1 (S241)	PDK1	S241	426	475	12%
PKC-related kinase 1 (T778)	PRK1	T778	238	255	7%
PKC-related kinase 2 (T816)	PRK2	T816			
Protein kinase B (T308)	PKBa (Akt1)	T308			
Protein kinase C alpha/beta (T638)	PKCa/b	T638	1126	399	-65%
Protein kinase C delta (T505)	PKCd	T505	124	87	-30%
Protein kinase C zeta (T410)/lambda (T403)	PKCz/l	T410/403	132	88	-33%
Protein kinase D (Protein kinase mu) (S916)	PKCm/PKD	S916	62	71	15%
Protein kinase theta (T538)	PKCt	T538	1075	1145	7%
Raf (S259) (60)	Raf1	S259	1354	1760	30%
Raf (S259) (70)	Raf1	S259	358	170	-53%
Retinoblastoma Protein (S780)	Rb	S780	125	115	-8%
Retinoblastoma Protein (S807/S811)	Rb	S807/S811			
The mammalian target of Rapamycin (S2448)	mTOR	S2448	101	480	375%
Type I protein phosphatase alpha (T320)	PP1a	T320			
Zap70 (Y319)/Syk (Y352)	Zap70/Syk	Y319/Y352			



**Supplementary Figure 1.** Comparative analysis of control and IKK2<sup>mk0</sup> animals (A) Body weight of wild type (filled bar) and IKK2<sup>mk0</sup> (open bar) mice (n=8 and n= 7, respectively). IKK2<sup>mk0</sup> mice had 10% body weight than controls. (B) Skeletal muscles (WT n=5 and IKK2<sup>mk0</sup> n=5) were dissected, weighed and normalized to total muscle weight for comparison among different animals. Muscles of IKK2<sup>mk0</sup> and control mice had similar weight muscles from controls. EDL=extensor digitorum longus, TA=tibialis anterior, gastroc=gastrocnemius, triceps=triceps brachii. (C-G) CSA measurements in control and IKK2<sup>mk0</sup> soleus (C-D) and EDL (E-G) show similar fast, intermediate and slow fibre sizes.

**Supplementary Figure 2. Kinetworks protein profiling of control and IKK2<sup>mk0</sup> gastrocnemius muscles 28 days after denervation.** Proteins with enhanced or reduced phosphorylation are listed. Note that the blank boxes represent proteins that have been tested but didn't show any change.

**Supplementary Figure 3. IKK2 depletion improves regeneration even at high doses of CTX injection.** Note increased fibrotic tissue (blue trichrome staining) in control compared to IKK2<sup>mk0</sup> injured muscles.