SUPPLEMENTARY FIGURES

Figure S1

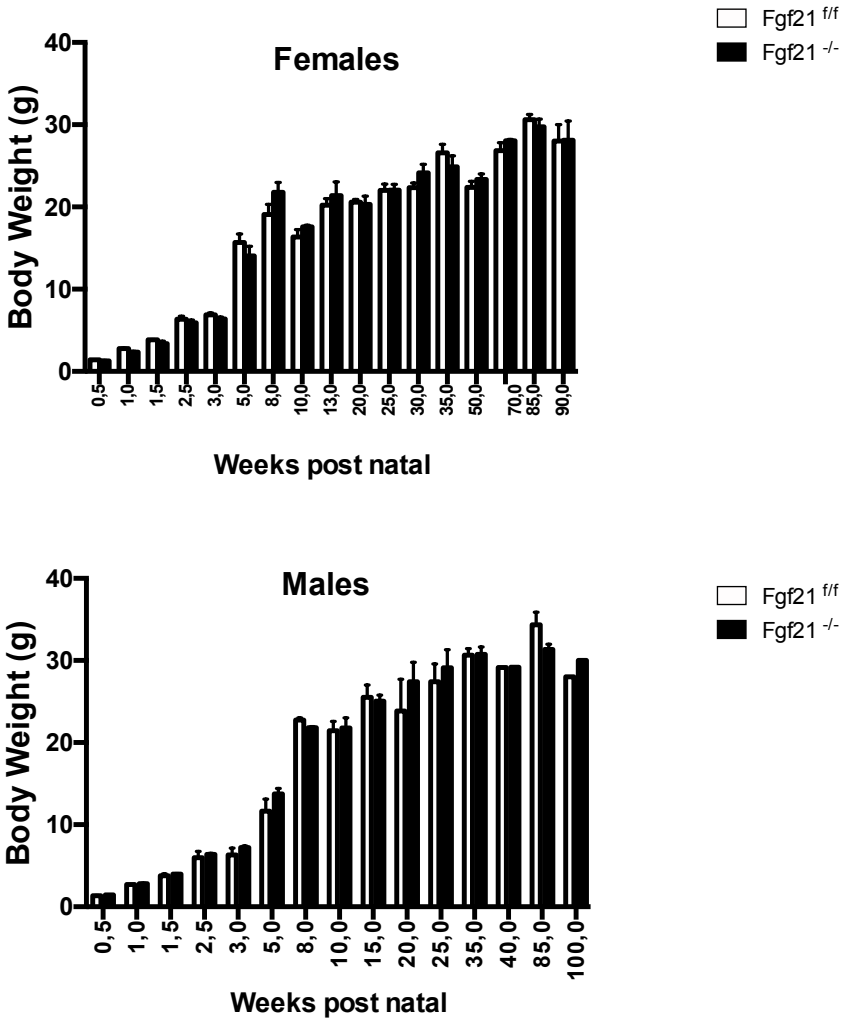

FIGURE S1:
Body weight of both, females (upper graph) and males (lower graph) versus post-natal weeks of control and FGF21-null mice.

Figure S2

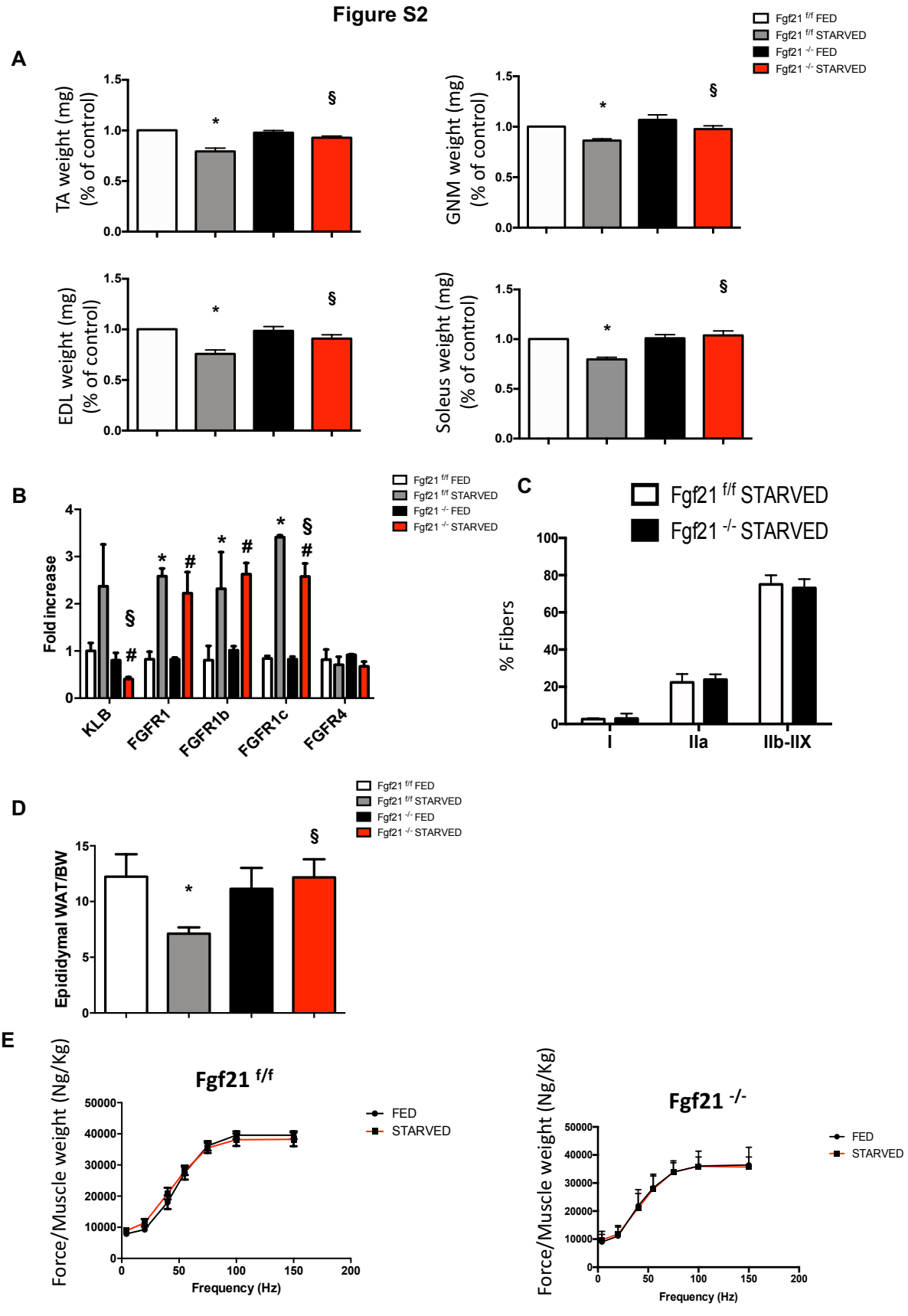
A
Fgf21 f/f FED
Fgf21 f/f STARVED
Fgf21 -/- FED
Fgf21 -/- STARVED
TA weight (mg) (% of control)
GNM weight (mg) (% of control)
EDL weight (mg) (% of control)
Soleus weight (mg) (% of control)
B
Fold increase
KLB
FGFR1
FGFR1b
FGFR1c
FGFR4
C
Fgf21 f/f STARVED
Fgf21 -/- STARVED
% Fibers
I
IIa
IIb-IIX
D
Epididymal WAT/BW
E
Fgf21 f/f
Fgf21 -/-
FED
STARVED
Force/Muscle weight (Ng/Kg)
Frequency (Hz)

FIGURE S2:
A) Wet weight relative to control of Tibialis anterior (TA), Gastrocnemius (GNM), Extensor Digitorum Longus (EDL) and Soleus muscles of controls and KO mice in fed and after 48 h of fasting B) RT-PCR for β-klotho (KLB) and different FGF receptors isoforms in skeletal muscle of fed and fasted control and FGF21 KO mice C) % of fibers expressing myosin heavy chain type I, IIA, IIB and IIX proteins in gastrocnemius muscles revealed by immunohistochemistry analysis in starved control and FGF21-null mice D) Epididymal fat content normalized to body weight (BW) is preserved in FGF21 KO mice during fasting E) Absolute muscle force normalized to GNM wet weight indicates the absence of myopathy in the conditions analyzed**. Significance p< 0.05. * compared to control fed, & compared to control fed, #compared to FGF21 KO fed, and § versus control starved.**

Figure S3

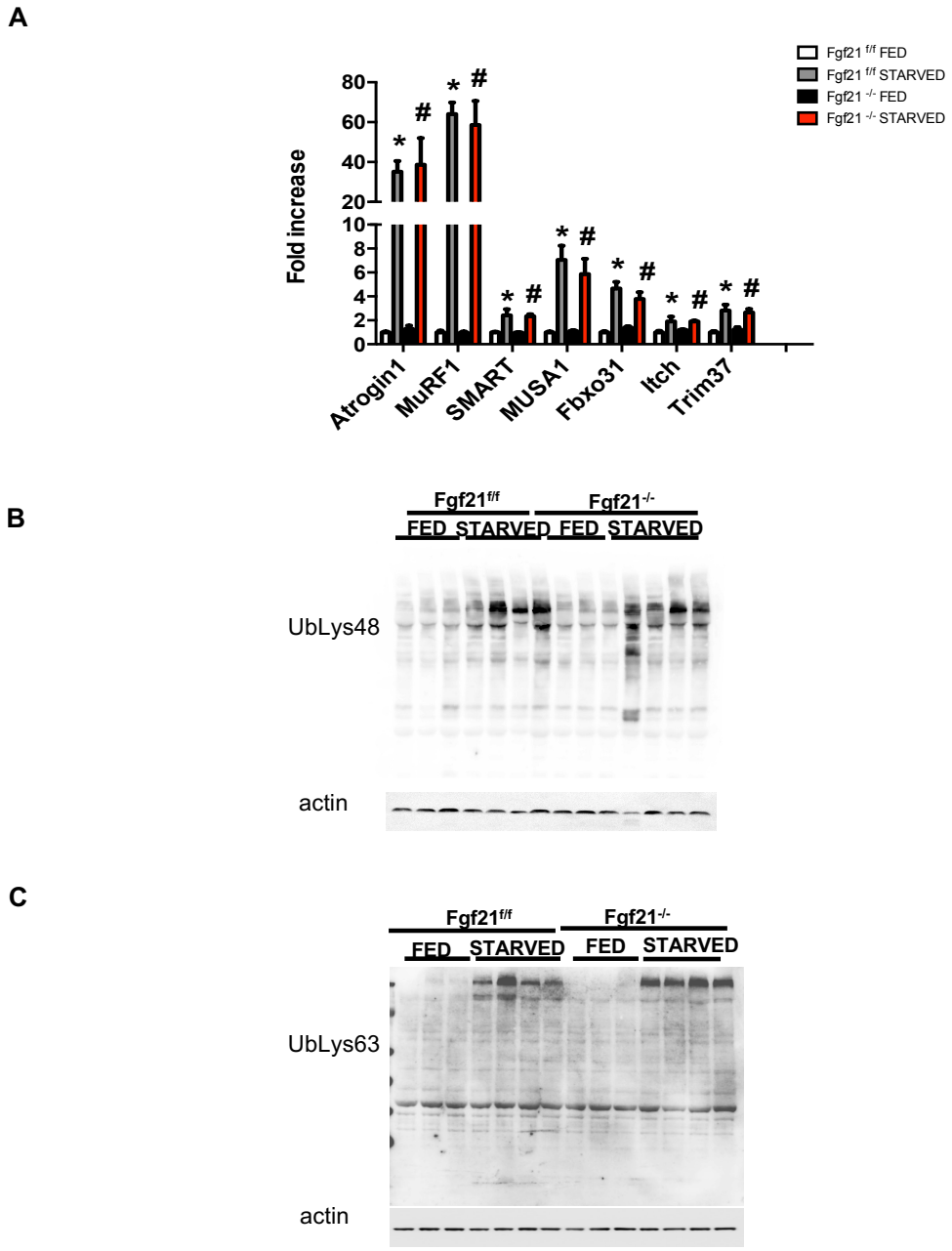

FIGURE S3:
A) q–PCR of Ubiquitin-Proteasome System-related transcripts from fed and 24-h starved tibialis anterior of control and FGF21 $^{-/-}$ muscles. Data are normalized to GAPDH and expressed as fold increase of control-fed mice B and C) Representative Western Blots of total muscle extracts immunoblotted for anti-Ubiquitin (Lys48) (B) and for anti-Ubiquitin (Lys63) (C) normalized to actin. Data are shown as mean ± s.e.m. Significance $p< 0.05$. * compared to control fed, & compared to control fed, #compared to FGF21 KO fed and § versus control starved.

Figure S4

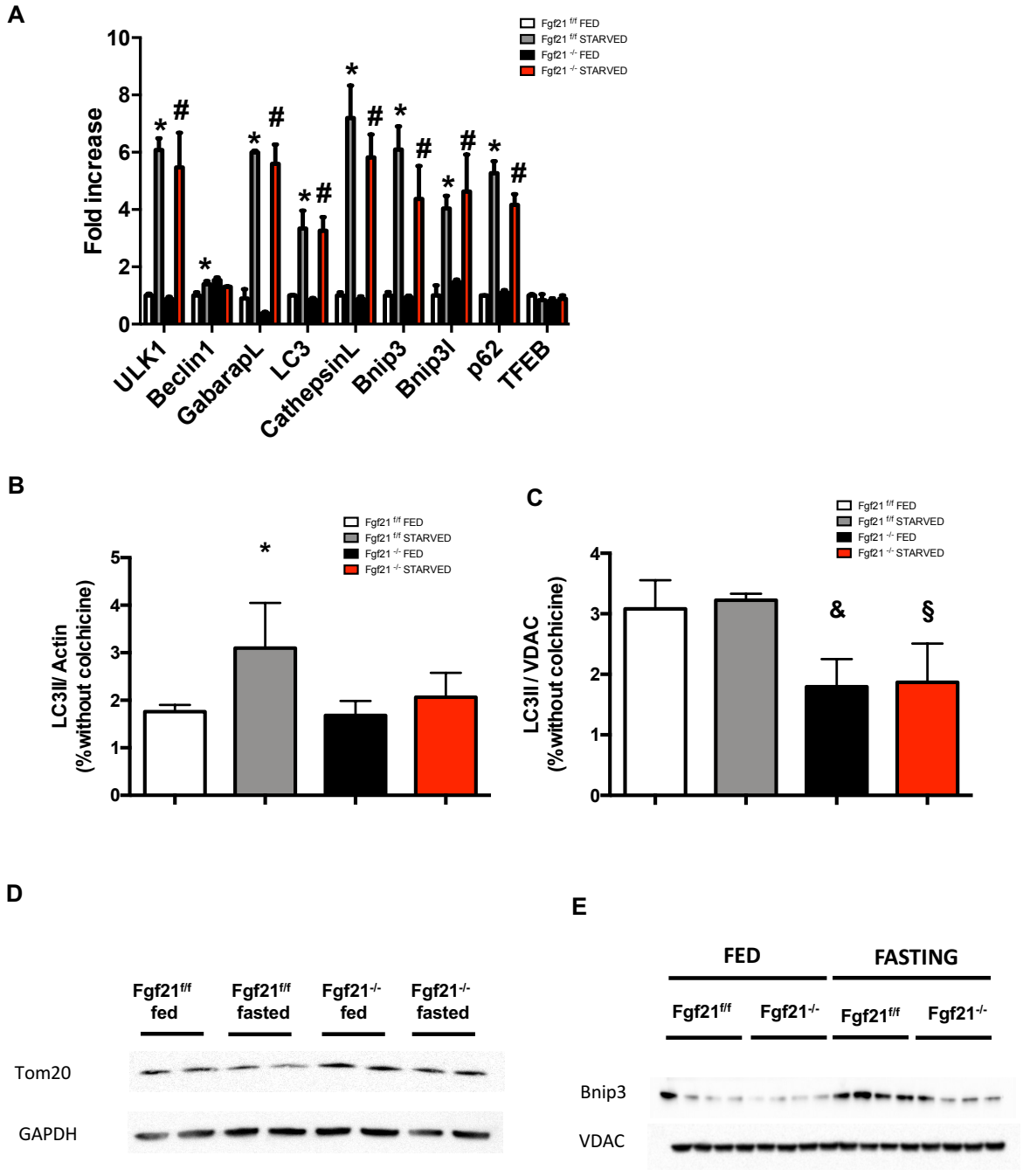

FIGURE S4:
A) q-PCR analysis of autophagy-related transcripts in fed and starved control and KO muscles normalized to GAPDH B) Fold increase of LC3II western blot of total muscle homogenates normalized to actin and plotted as a ratio between colchicine treated samples and paired samples without colchicine C) Fold increase of LC3II western blot of the mitochondrial fraction normalized to VDAC and plotted as a ratio between colchicine treated samples and paired samples without colchicine D) Representative Western Blots of Tom20 in muscle homogenates (D) and of Bnip3 in the mitochondrial fraction (E). Data are shown as mean ± s.e.m. Significance $p < 0.05$. * compared to control fed, & compared to control fed, #compared to FGF21 KO fed and § versus control starved.