

Supplementary Material

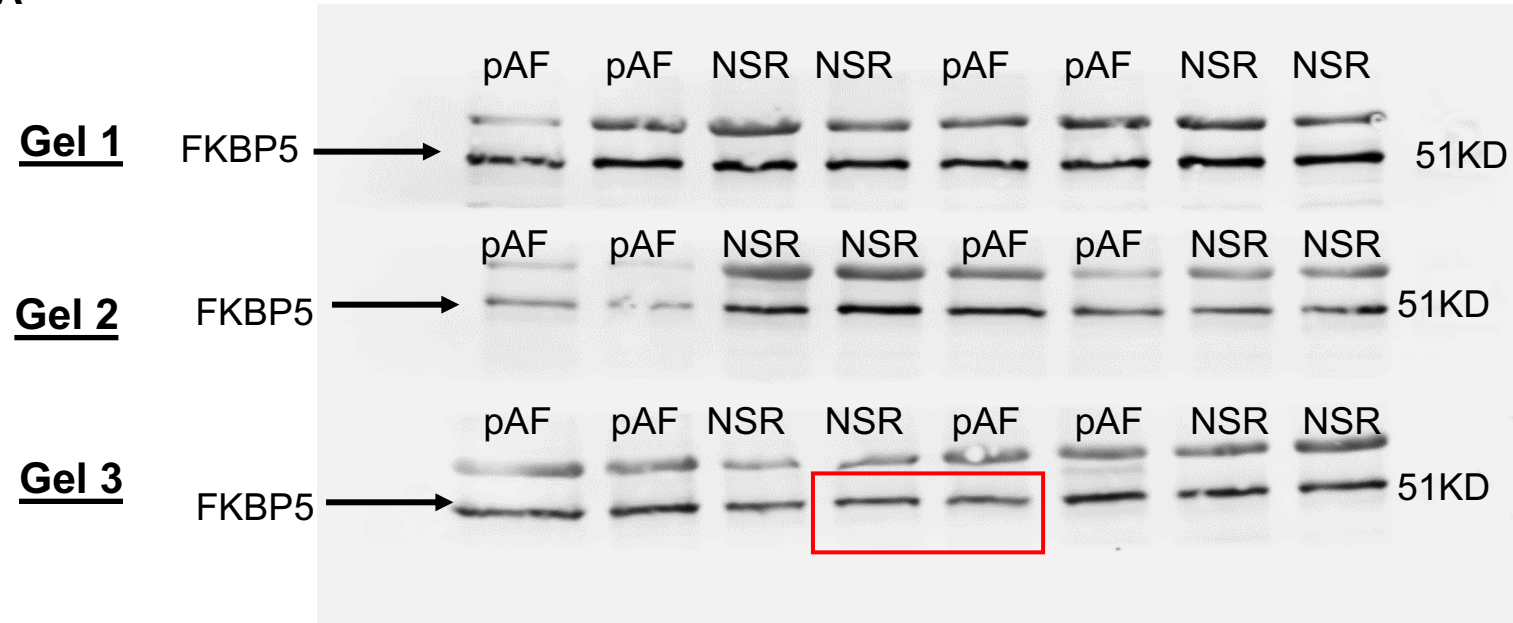
Downregulation of FKBP5 promotes atrial arrhythmogenesis

Xiaolei Wang, Jia Song, Yue Yuan, Luge Li, Issam Abu-Taha, Jordi Heijman, Liang Sun, Shokoufeh Dobrev, Markus Kamler, Liang Xie, Xander H.T. Wehrens, Frank T. Horrigan, Dobromir Dobrev, Na Li

Original Western blots

Red boxes indicated the representative images used in figures

Figure 1A



NSR: normal sinus rhythm;
pAF: paroxysmal AF

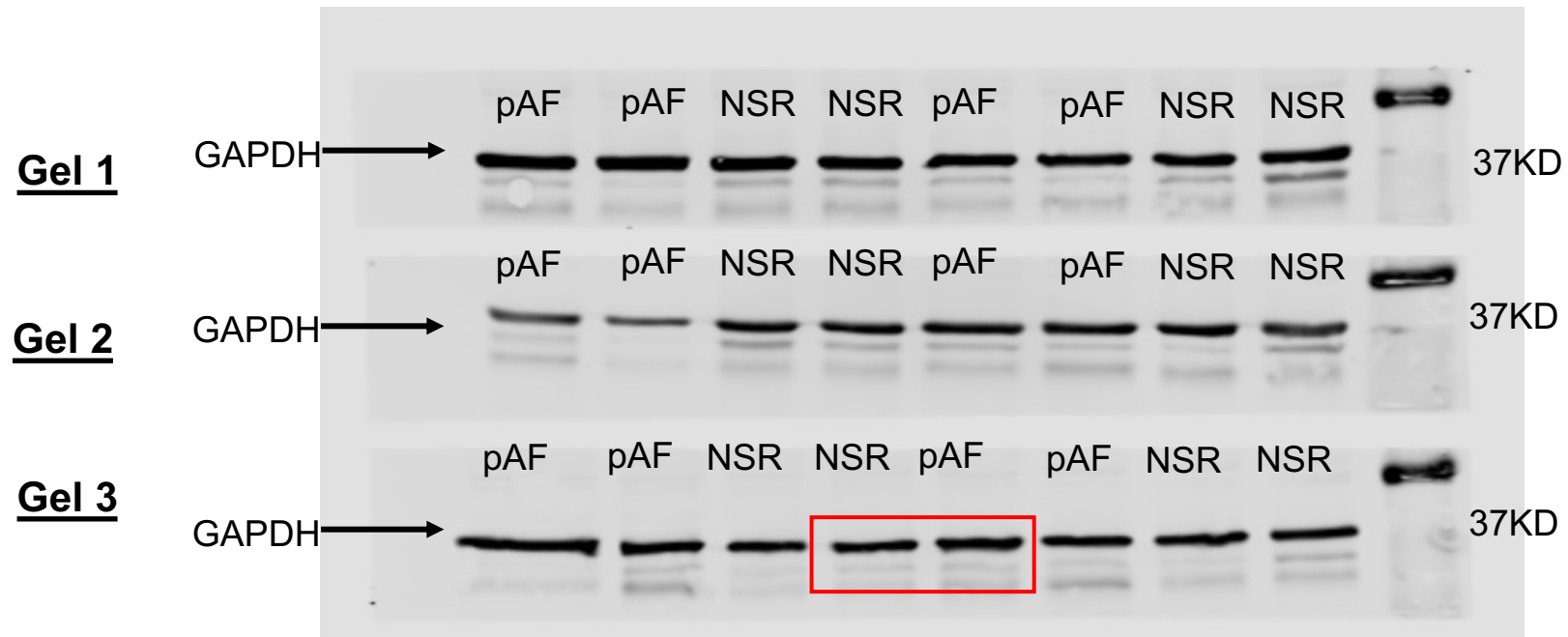
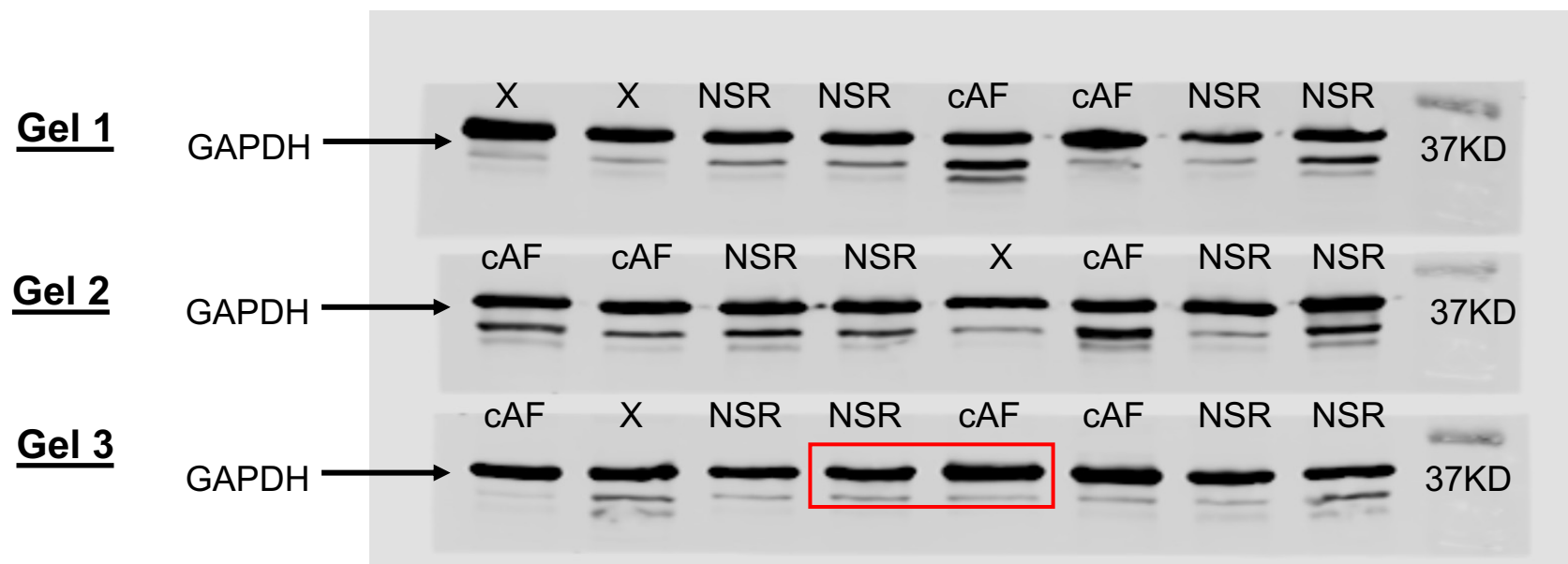
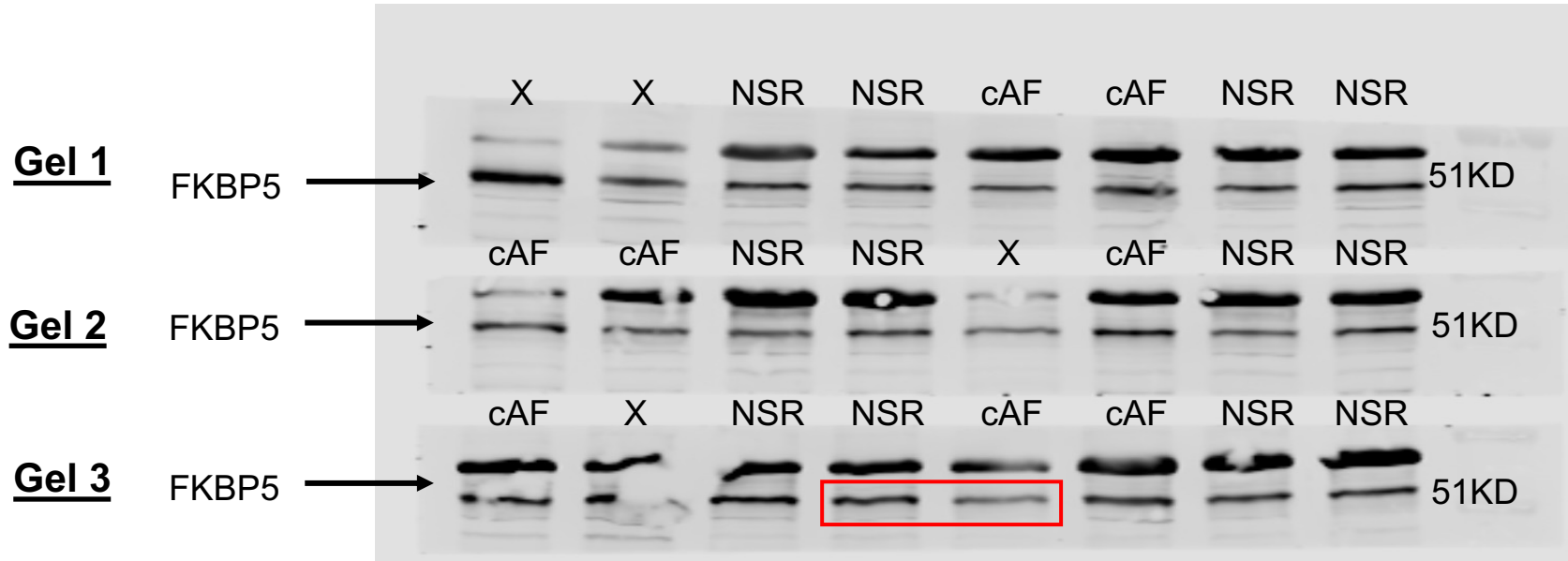


Figure 1B

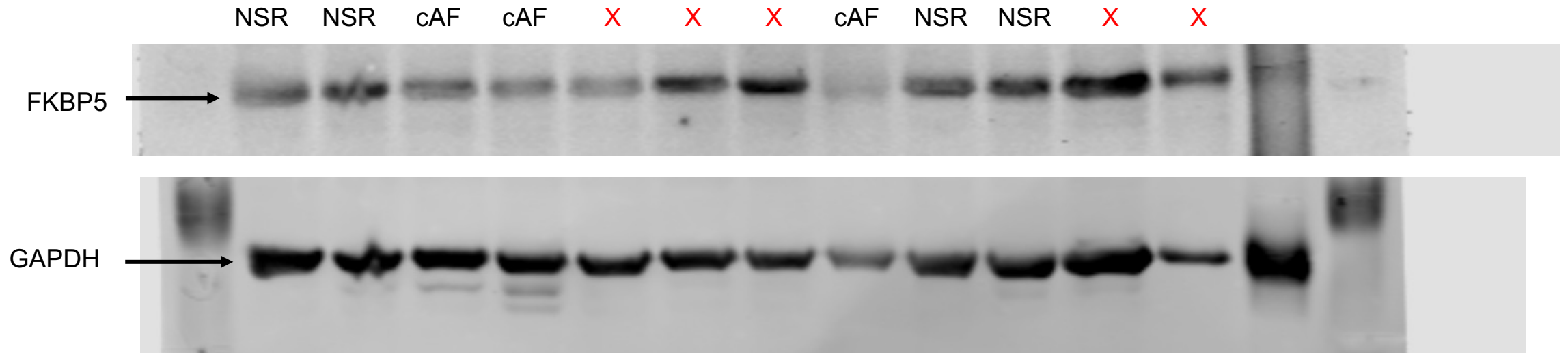


NSR: normal sinus rhythm; cAF: chronic AF

X marked the samples were excluded

Figure 1B

Gel 4

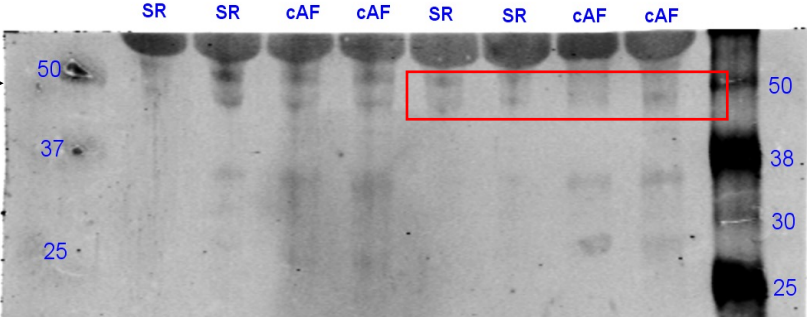


NSR: normal sinus rhythm; cAF: chronic AF

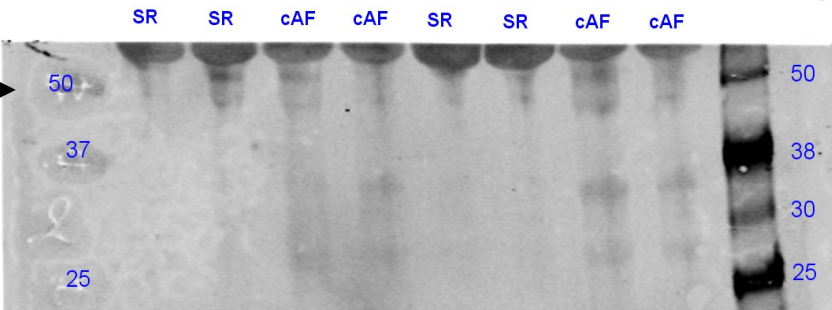
X marked the samples were excluded

Figure 1C

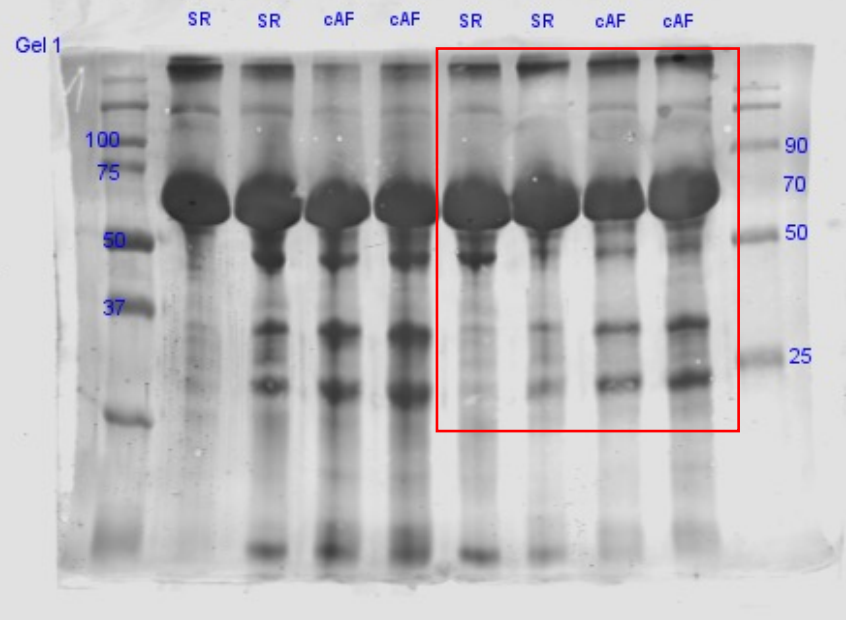
Gel 1 FKBP5



Gel 2 FKBP5



Total Protein stain



Total Protein stain

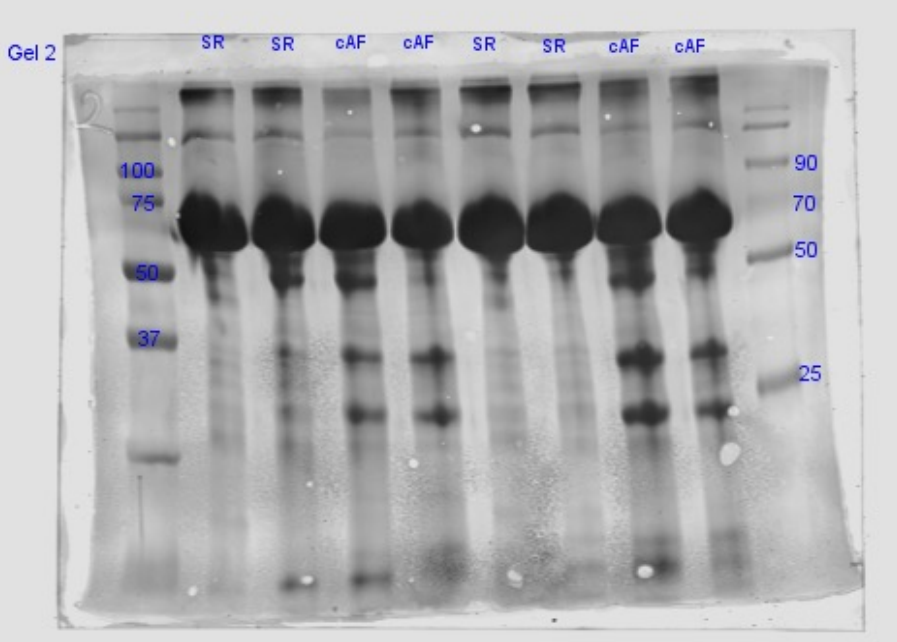
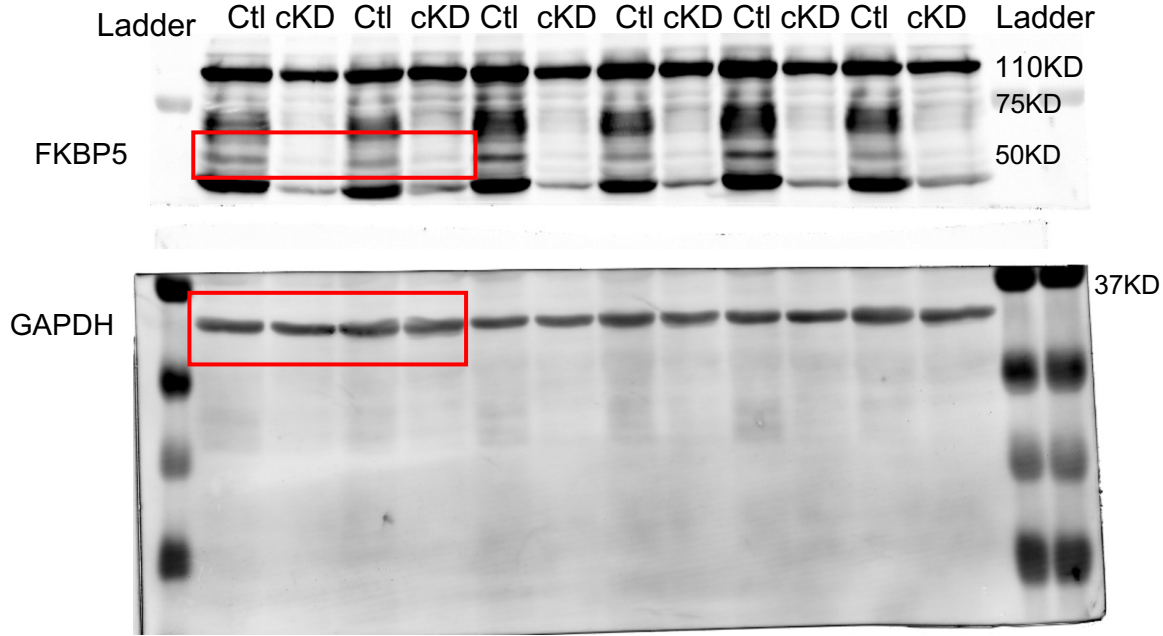
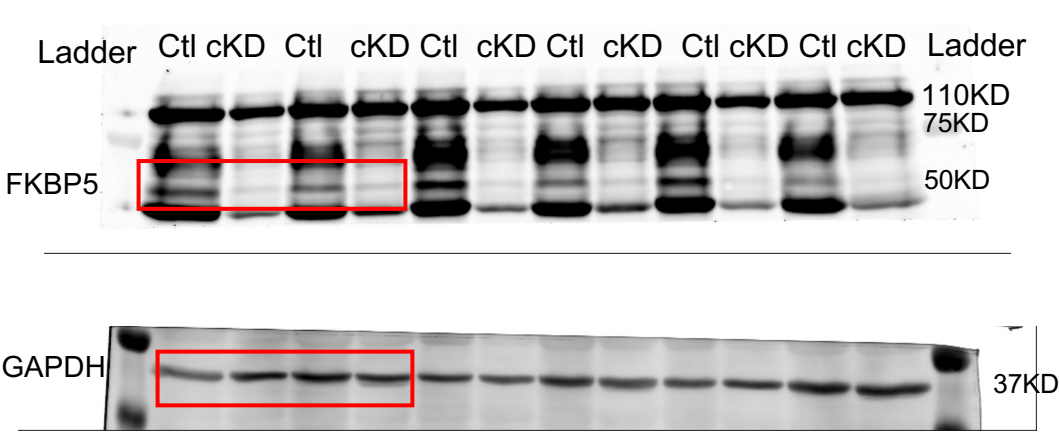


Figure 1F

Atria

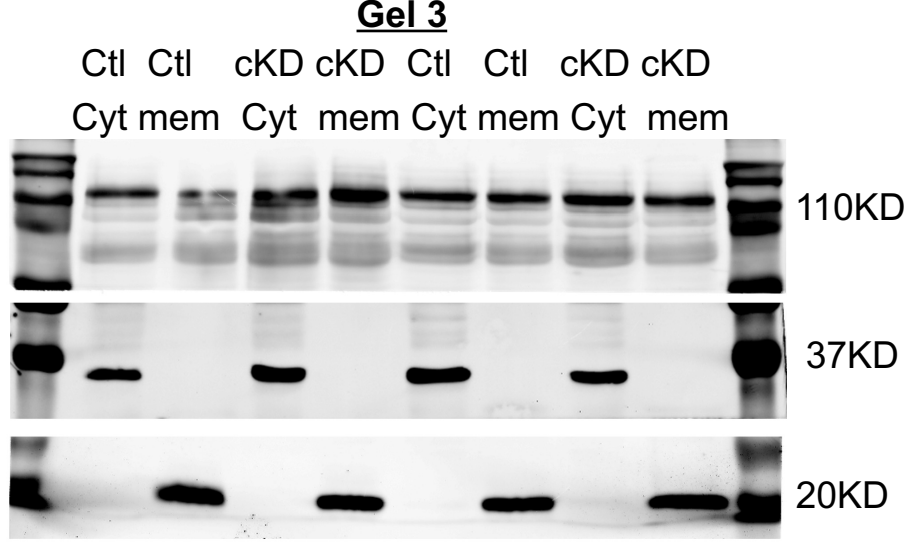
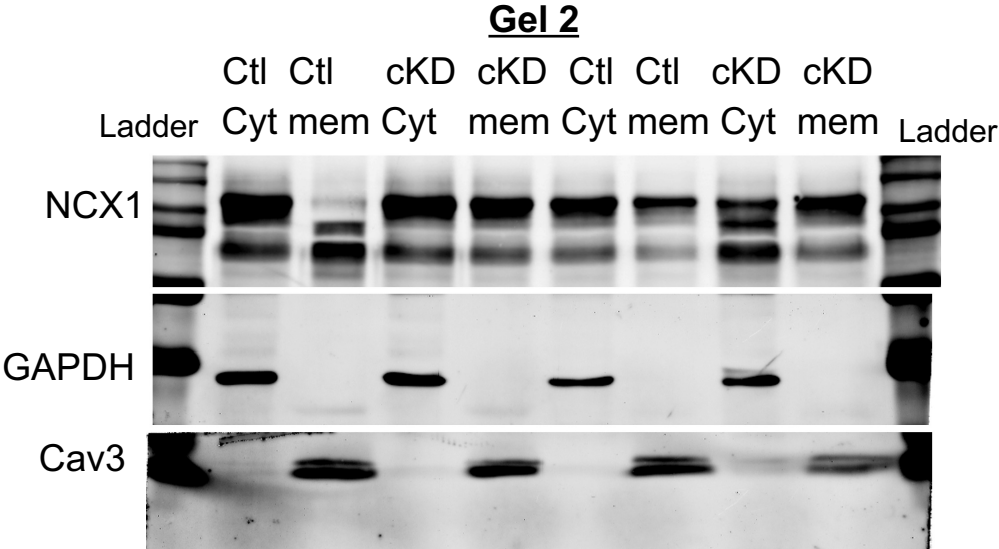
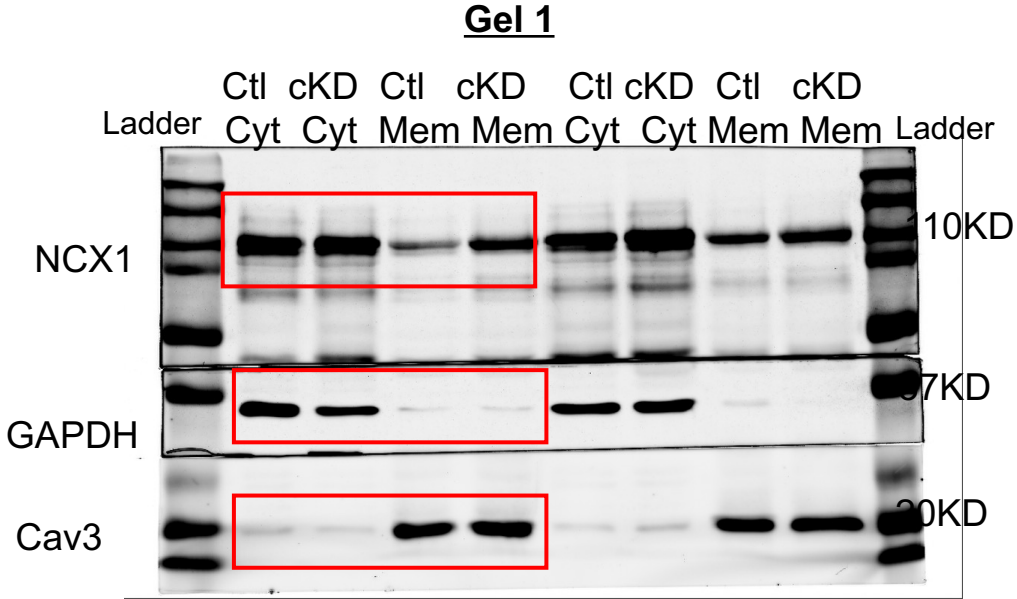


Ventricles



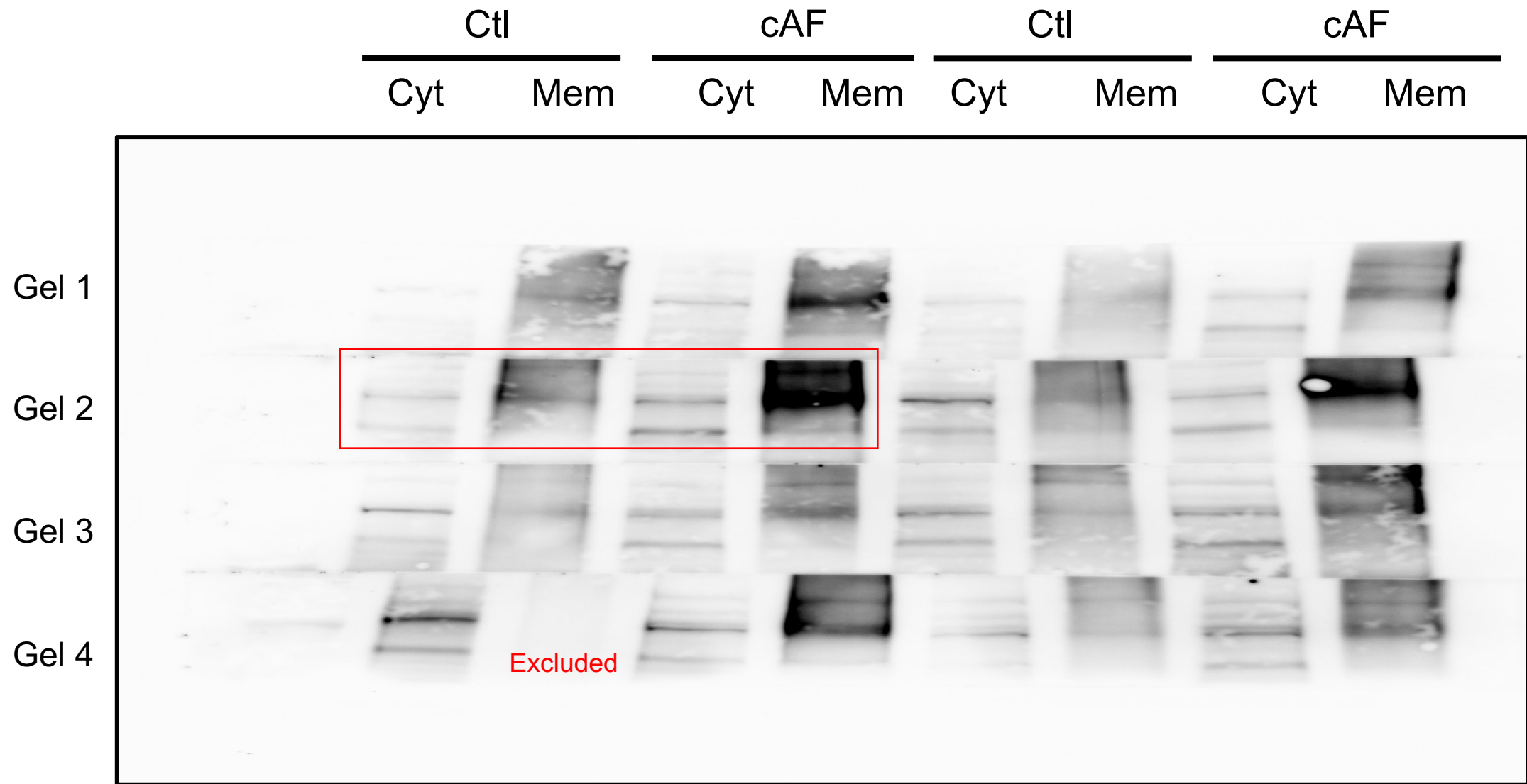
Ctl: control
cKD: FKBP5-cKD

Figure 4G-H



Ctl: control
cKD: FKBP5-cKD
Cyt: cytosol
Mem: membrane

Figure 4I – part 1



NSR: normal sinus rhythm
cAF: chronic AF

Cyt: cytosol
Mem: membrane

NCX

Figure 4I – part 3

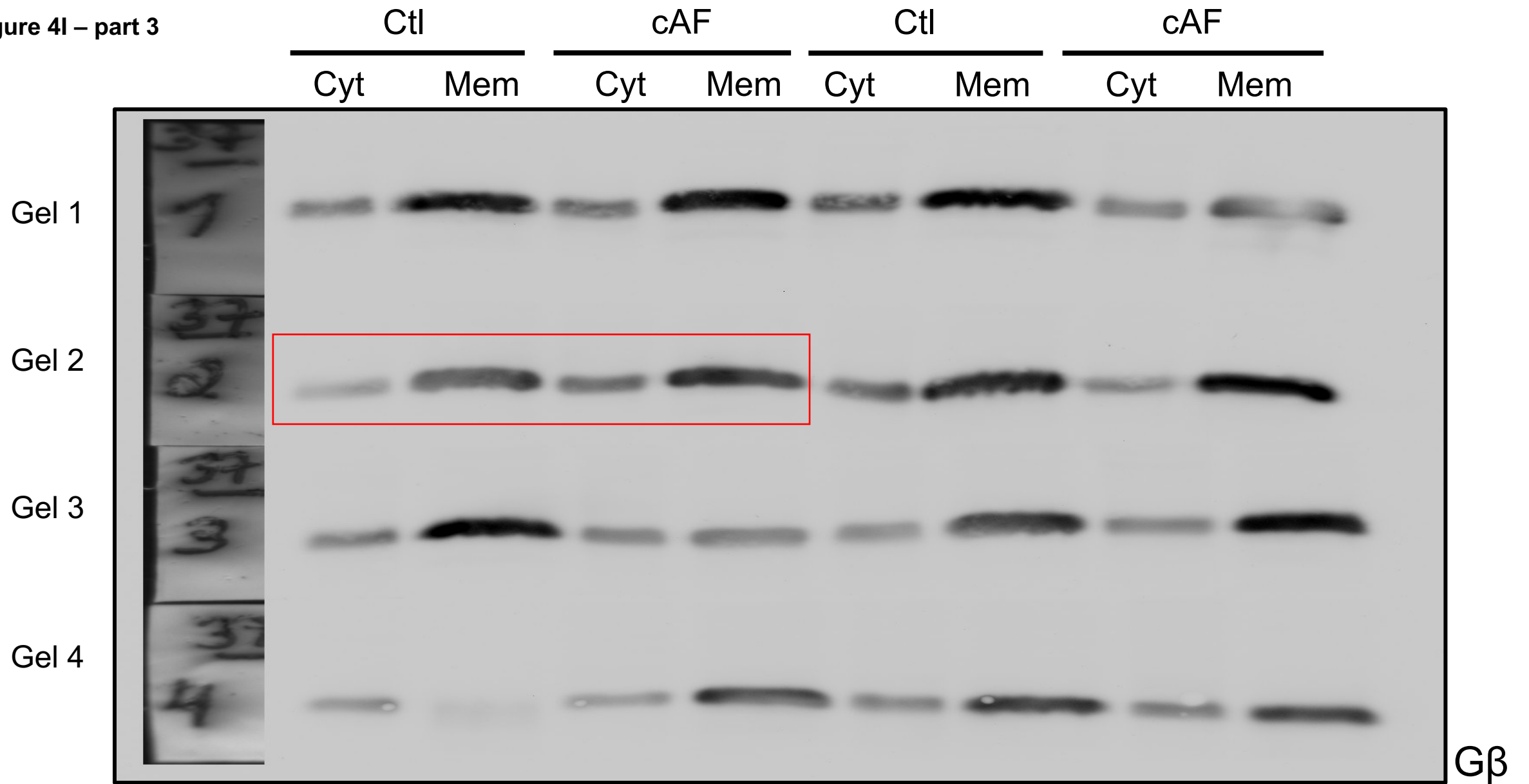
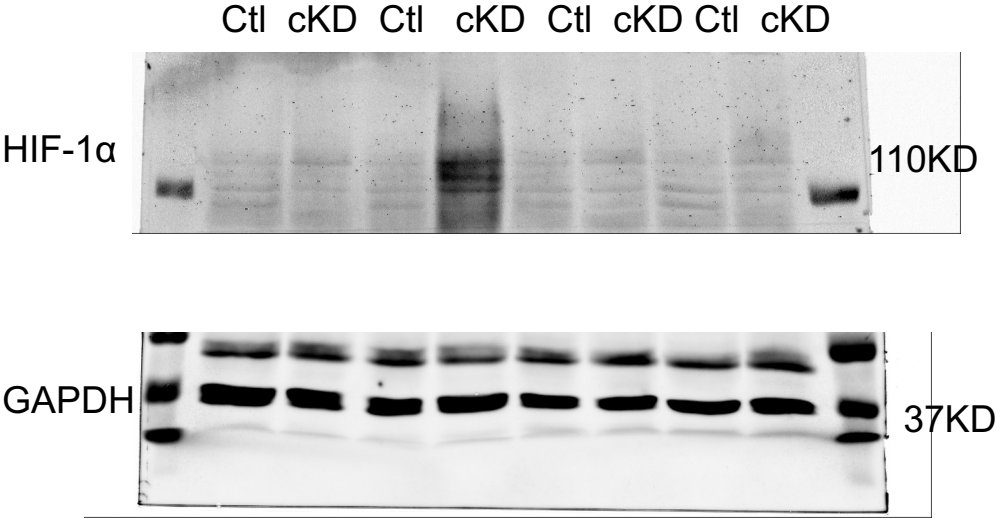
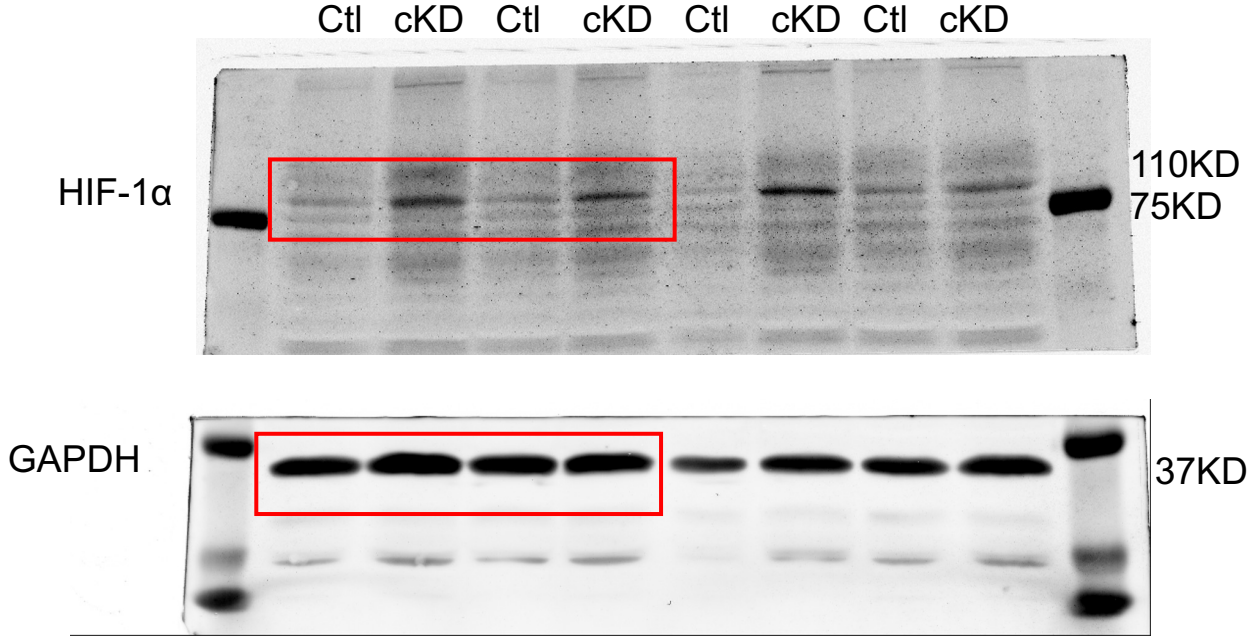


Figure 6A

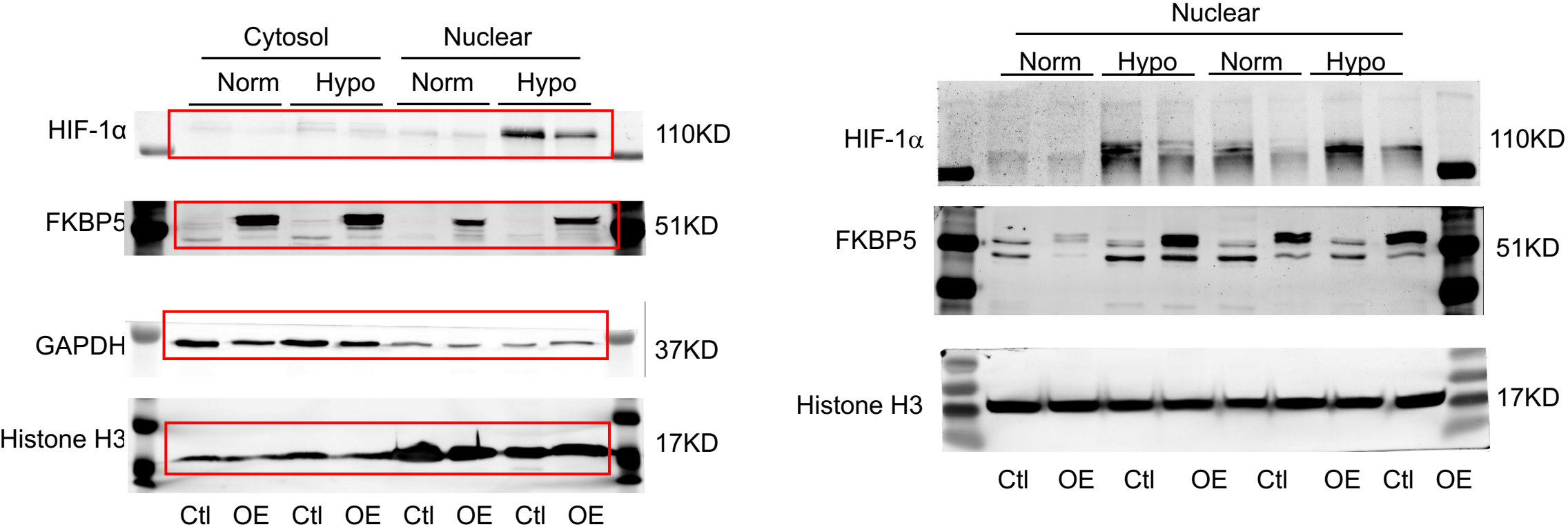
Gel 1

Gel 2



Ctl: control
cKD: FKBP5-cKD

Figure 6C-D



Norm: normoxia; Hypo: hypoxia

Ctl: transfection with pcDNA
OE: transfection with pcDNA.Fkbp5

Figure 6F

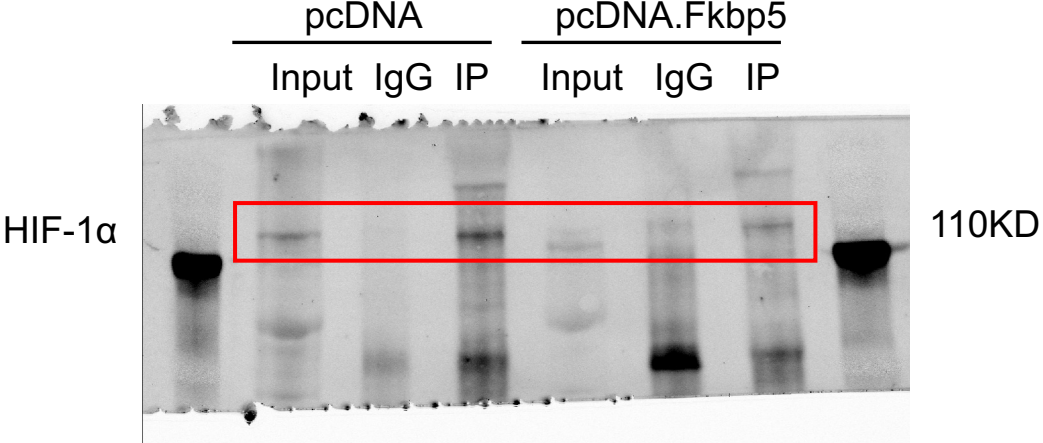
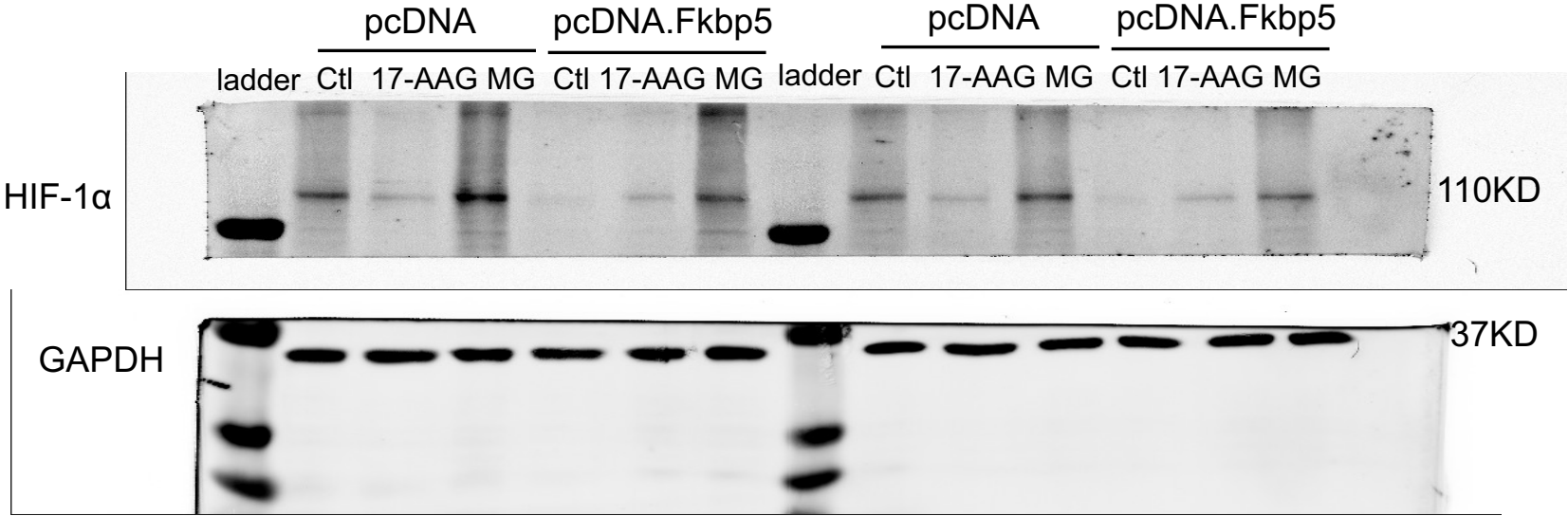
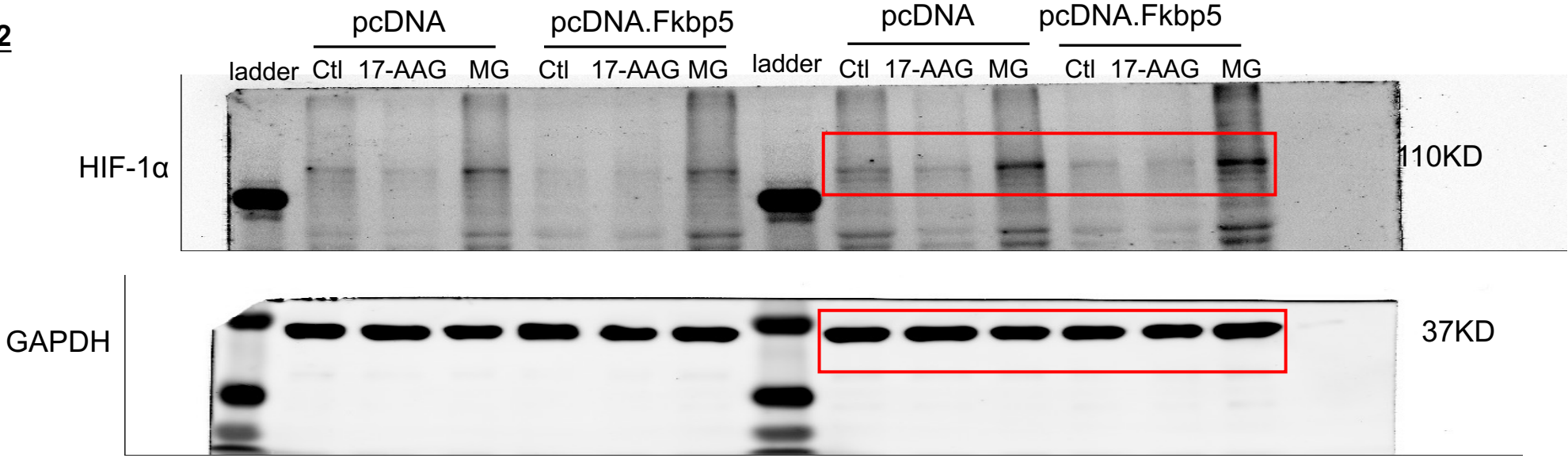


Figure 6G-H

Gel 1

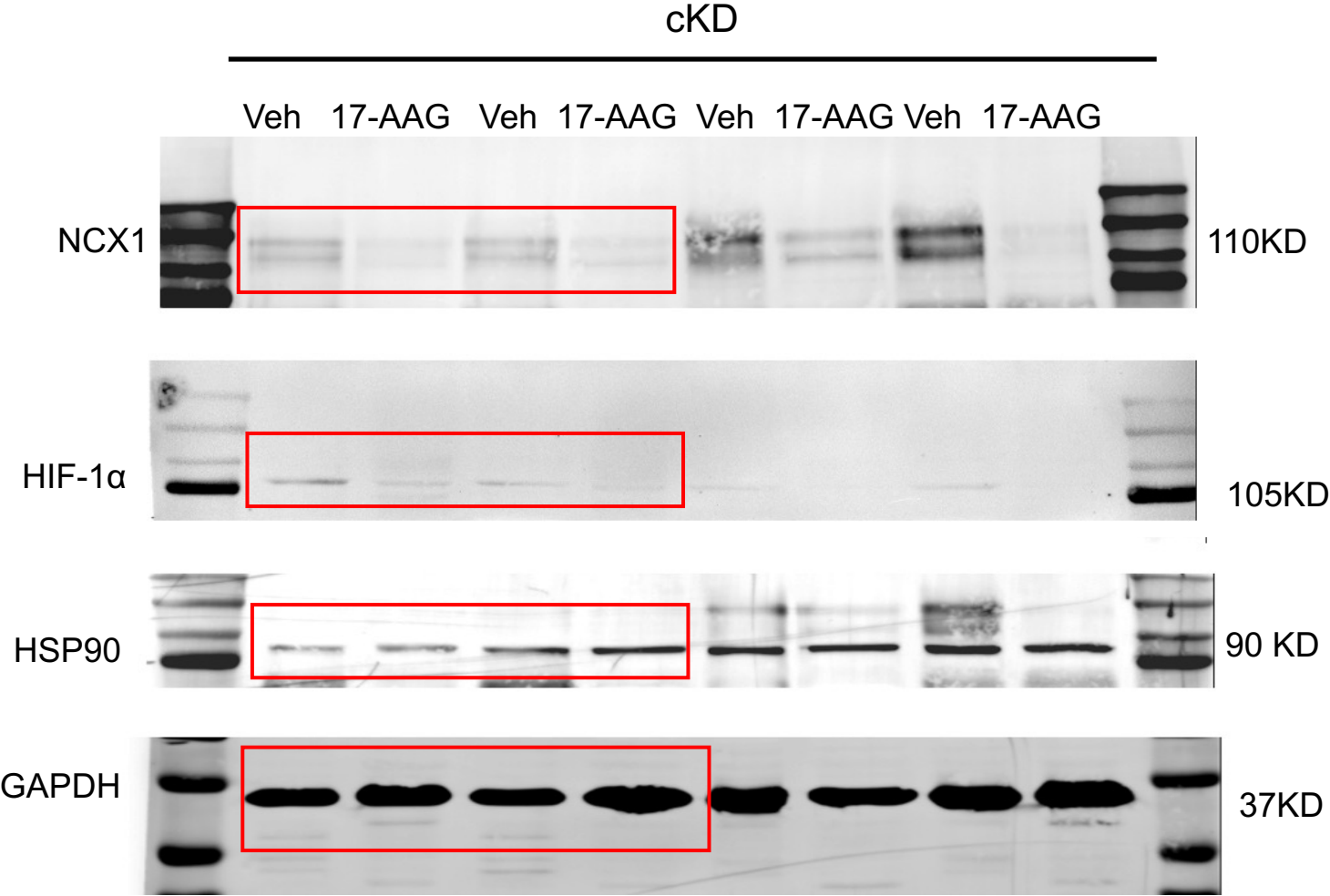


Gel 2



MG: MG-132.

Figure 7G-H



Veh: vehicle

Figure 8D-F

Atrial samples

Gel 1

Gel 2

Ctl aKD Ctl aKD Ctl aKD Ctl aKD Ctl aKD

Ctl aKD Ctl aKD Ctl aKD Ctl aKD Ctl Ctl

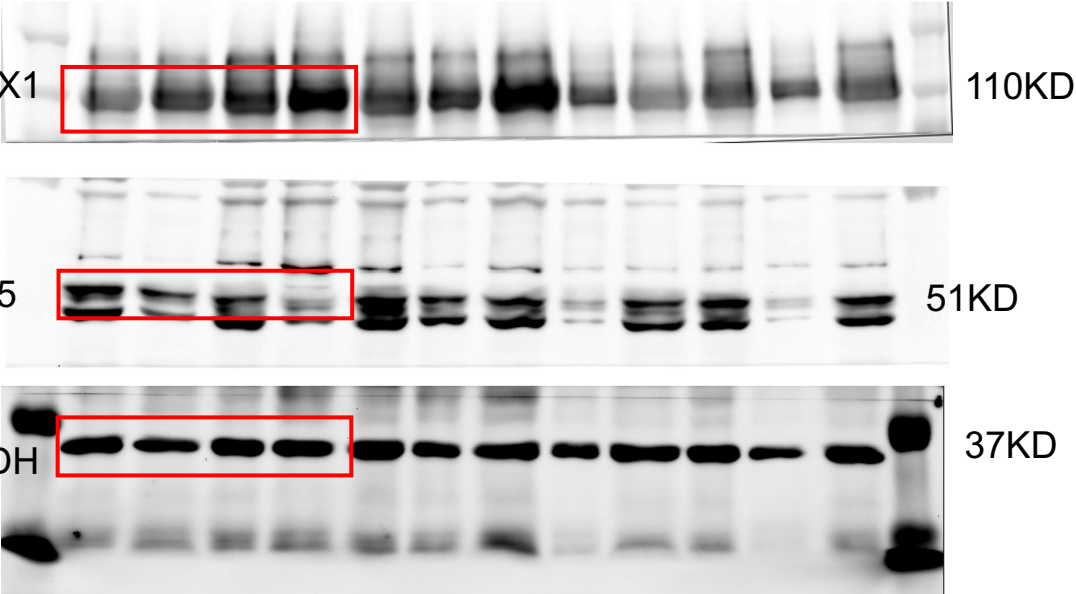
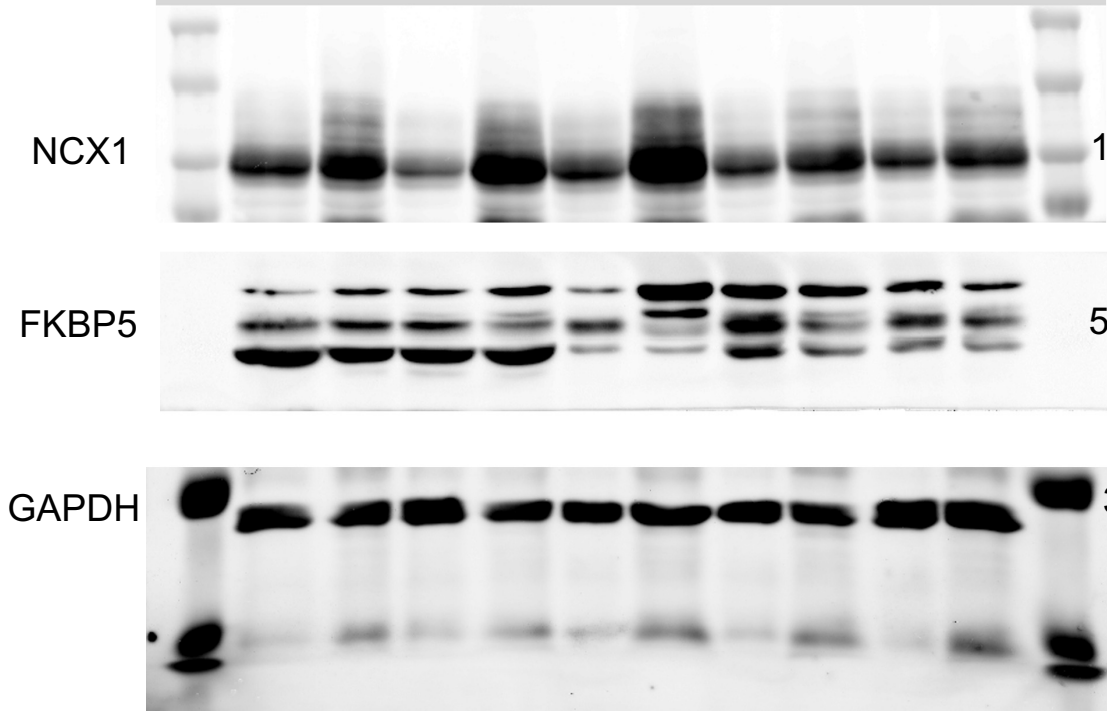
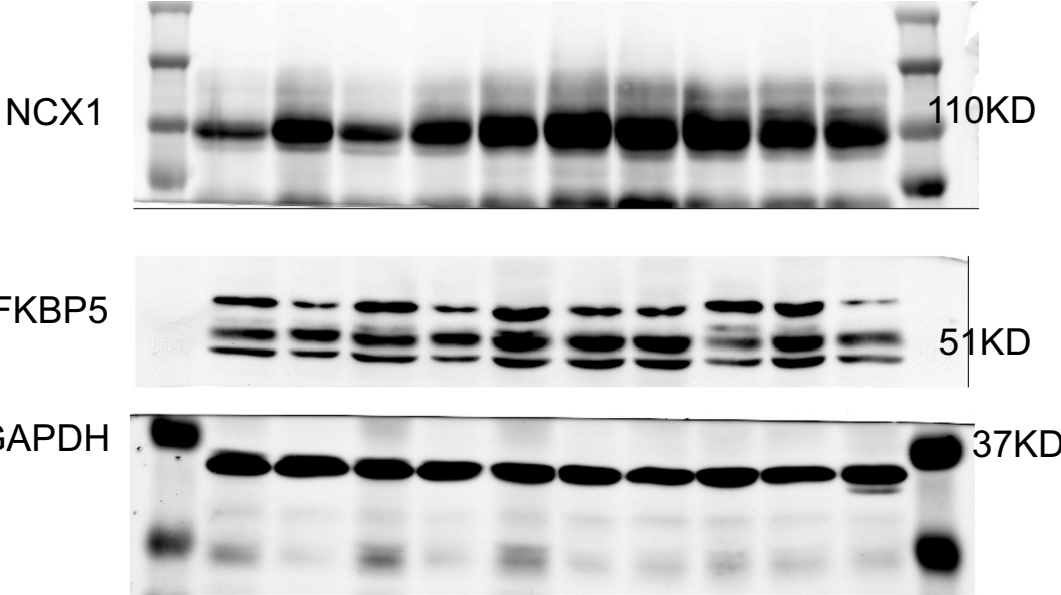


Figure 8D-F

Ventricular samples

Gel 1

Ctl aKD Ctl aKD Ctl aKD Ctl aKD Ctl aKD



Gel 2

Ctl aKD Ctl aKD Ctl aKD Ctl aKD Ctl aKD Ctl Ctl

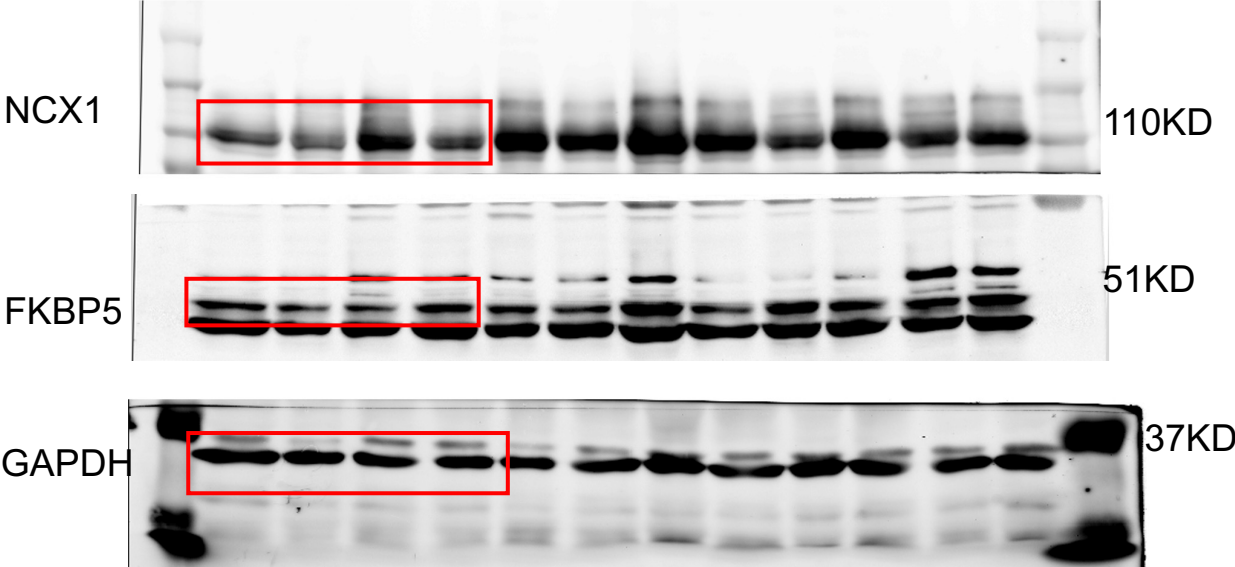
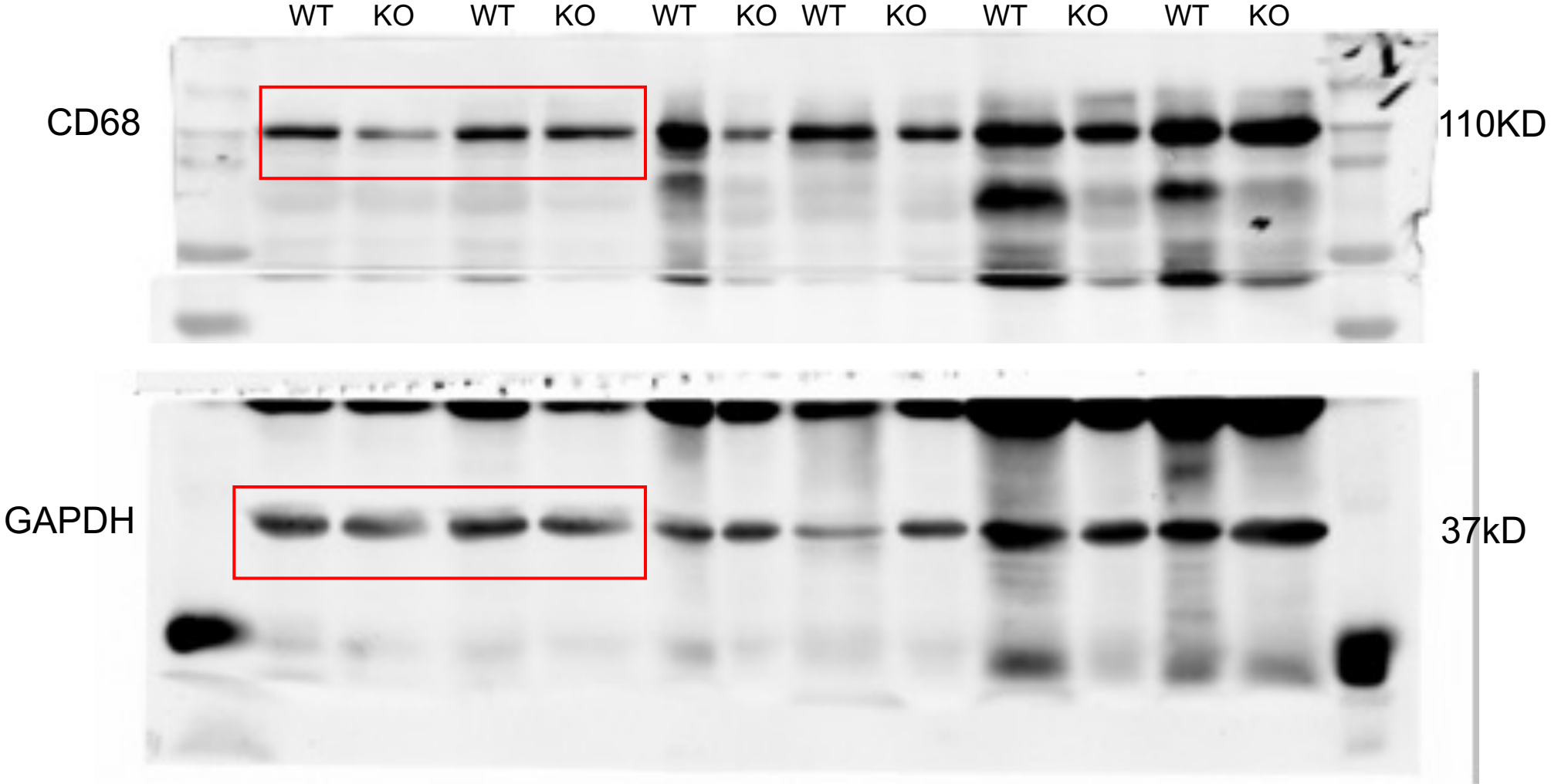


Figure S1C-D



KO: *Fkbp5*^{-/-}

Figure S3A-B

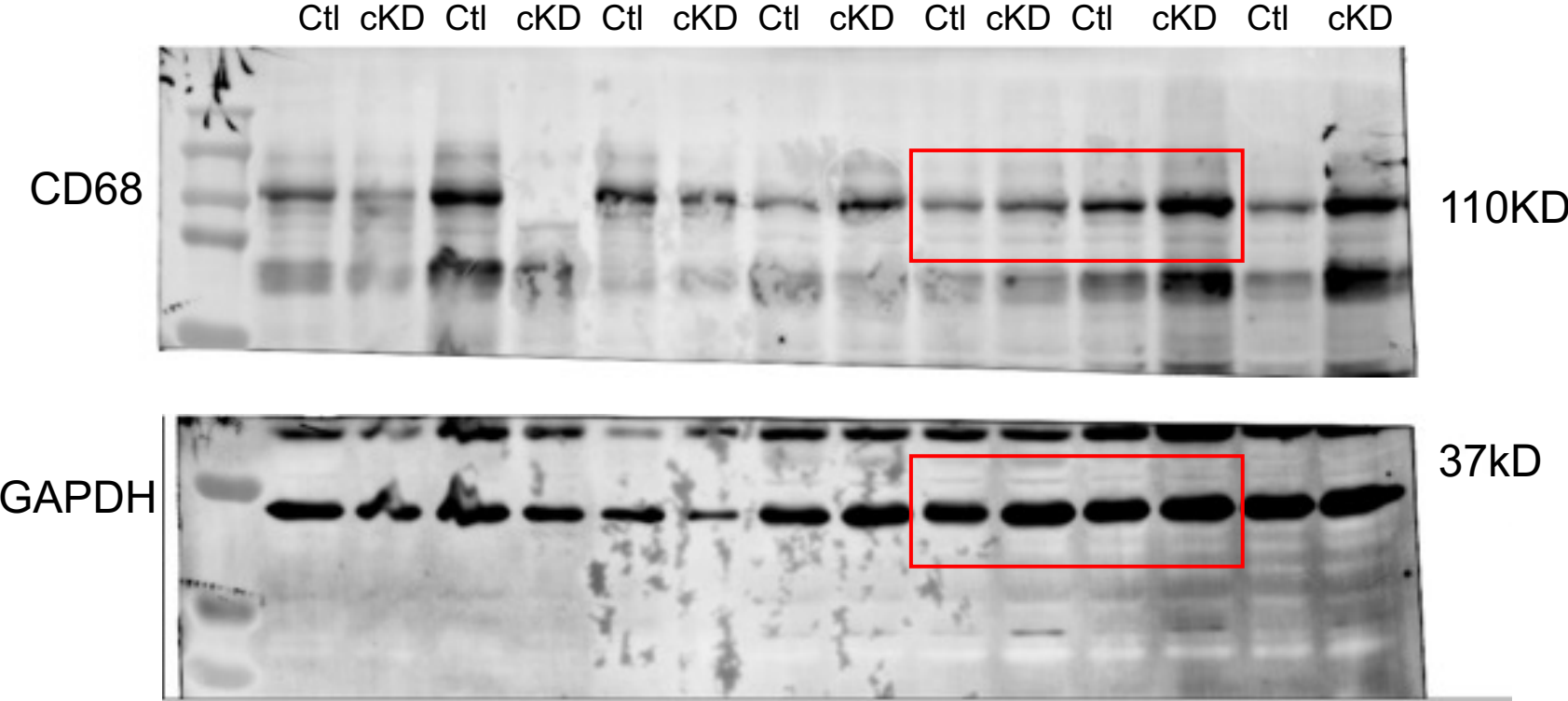


Figure S3C-D

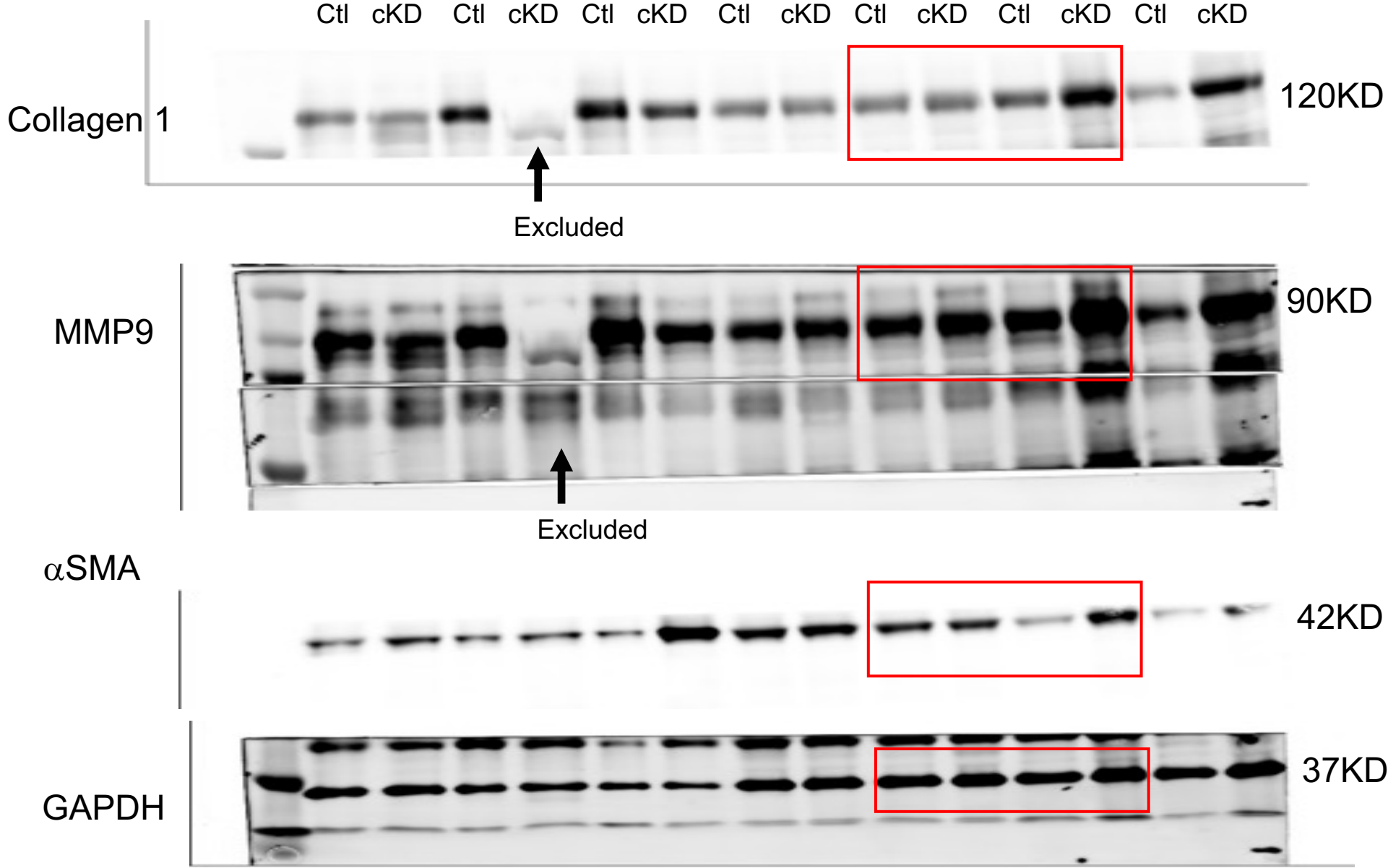


Fig.S5A

Atrial tissue

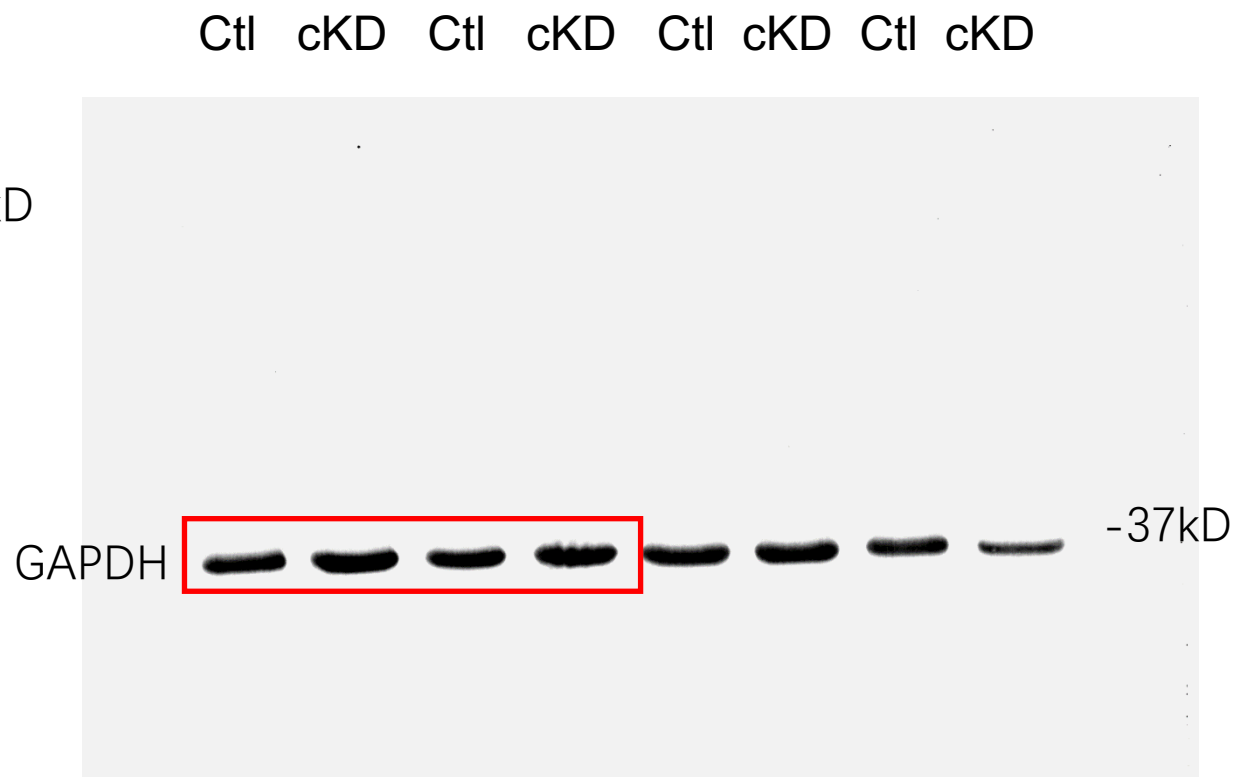
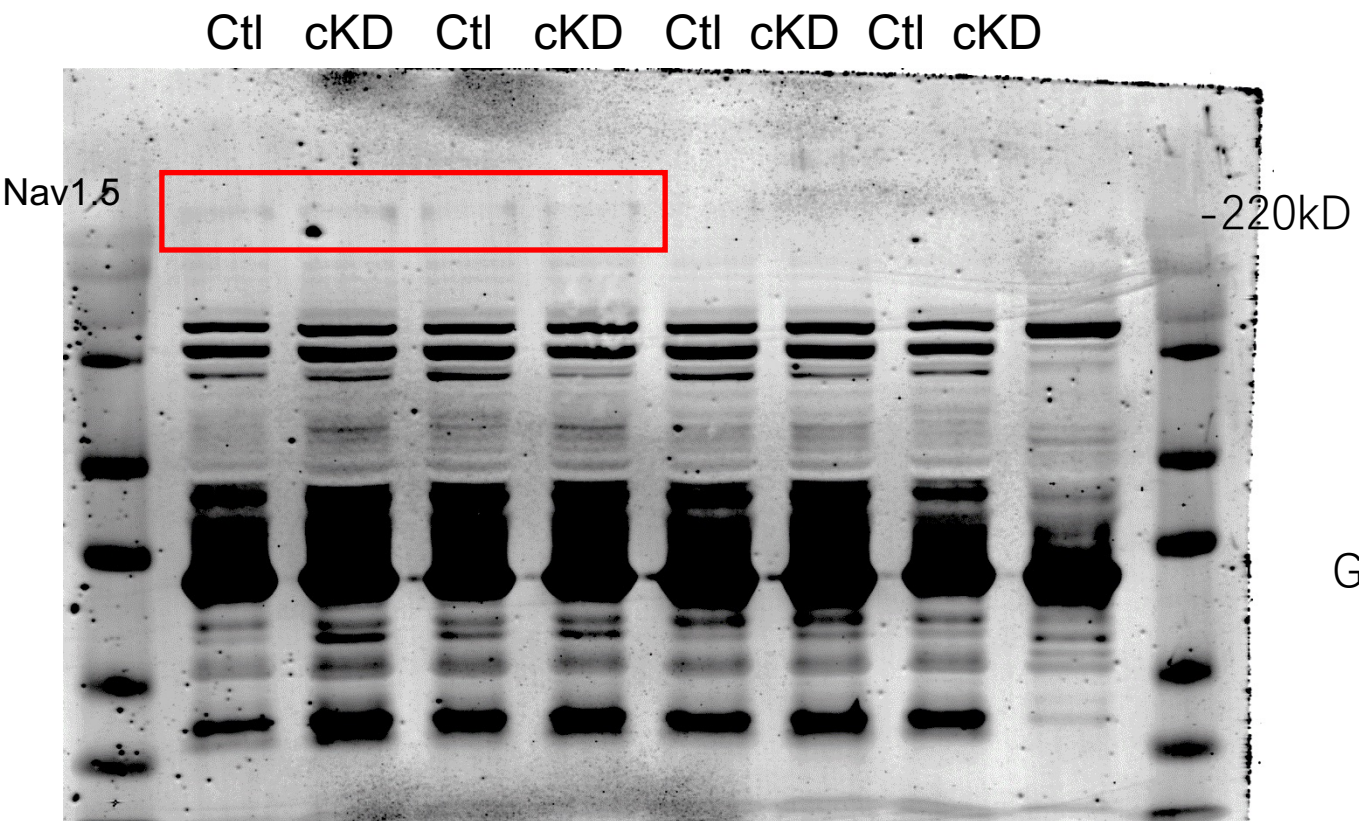


Fig.S5B

Atrial tissue

Ctl cKD Ctl cKD Ctl cKD Ctl cKD

Ctl cKD Ctl cKD Ctl cKD Ctl cKD

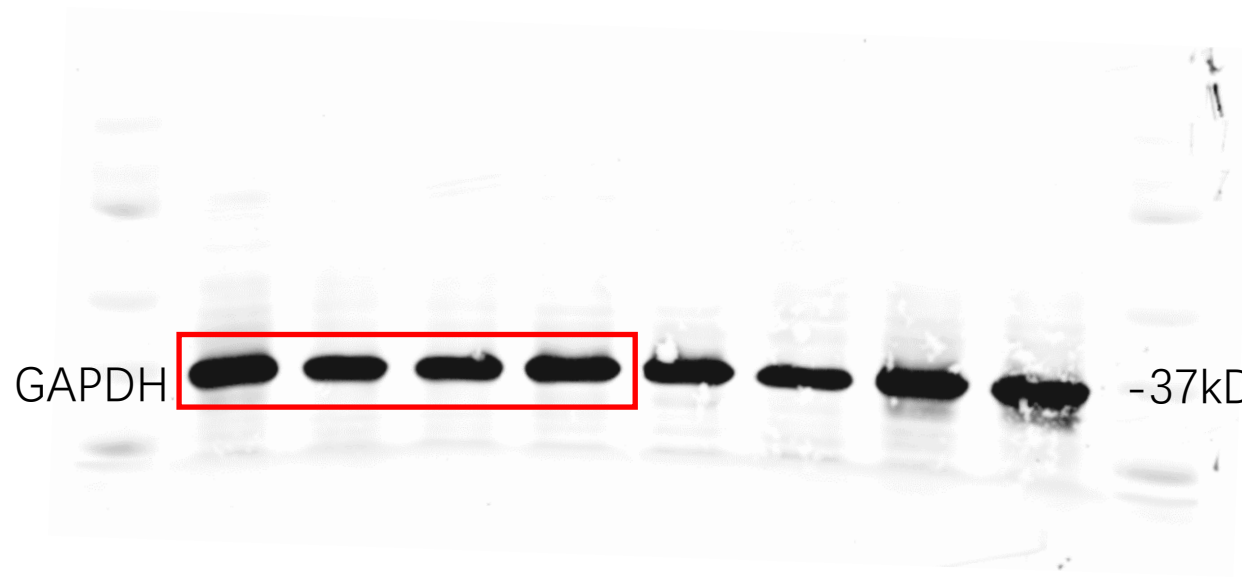
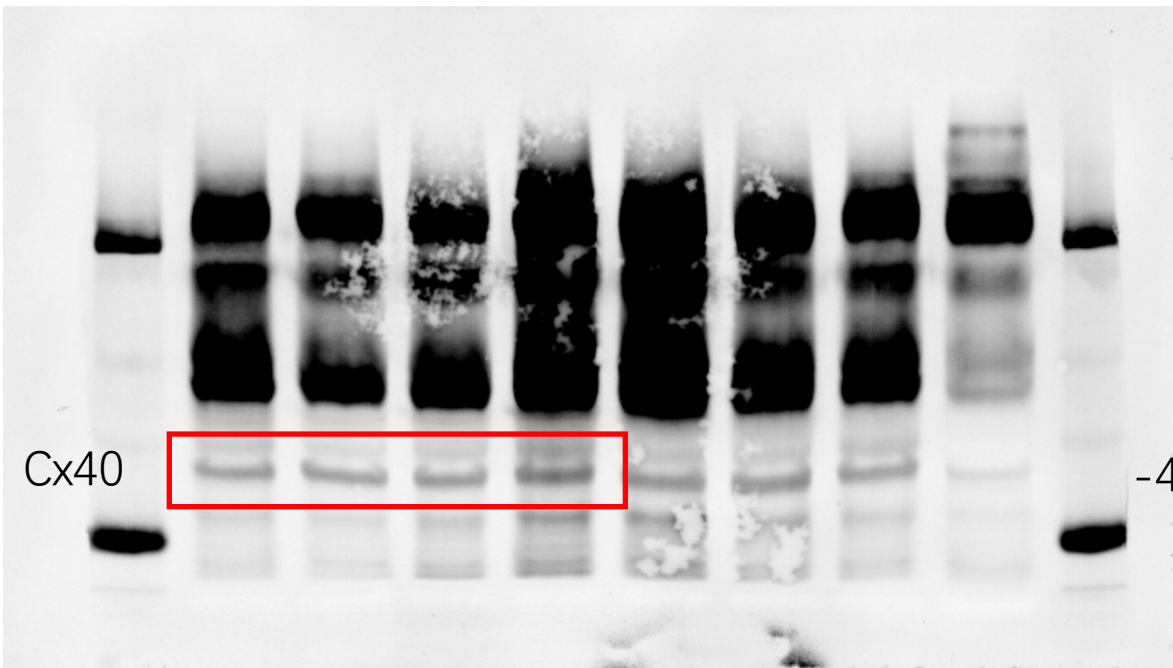


Fig.S5C

Atrial tissue

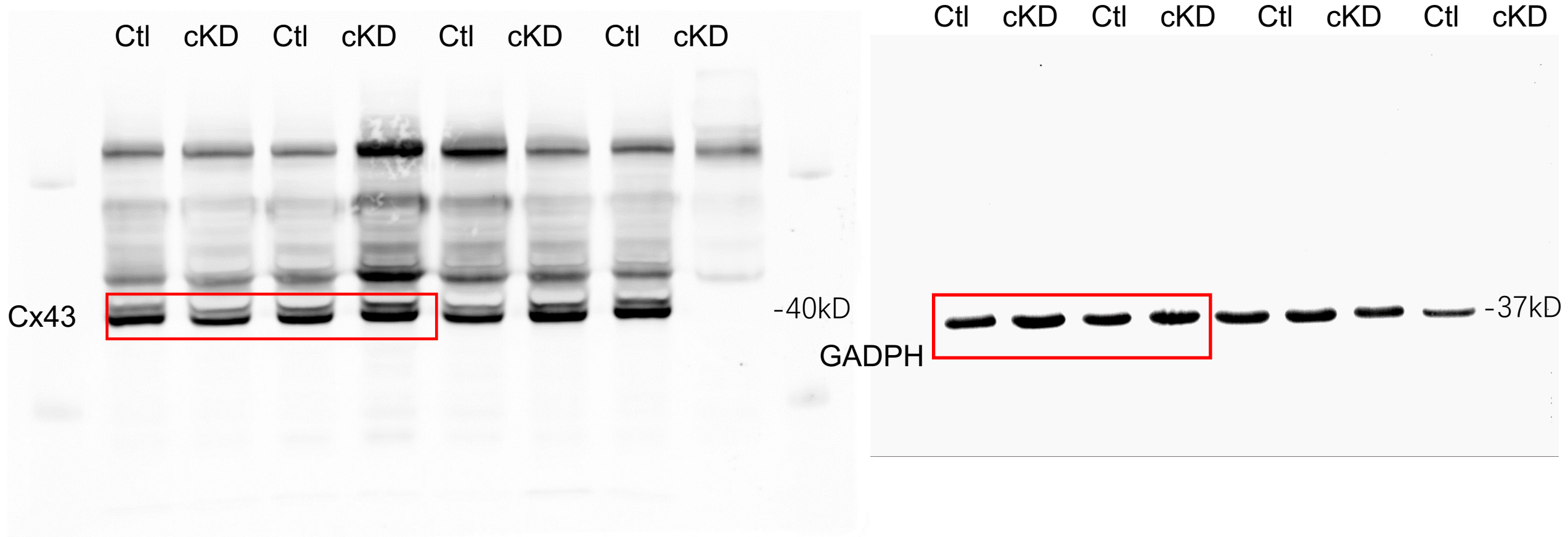


Figure S8A-B part 1

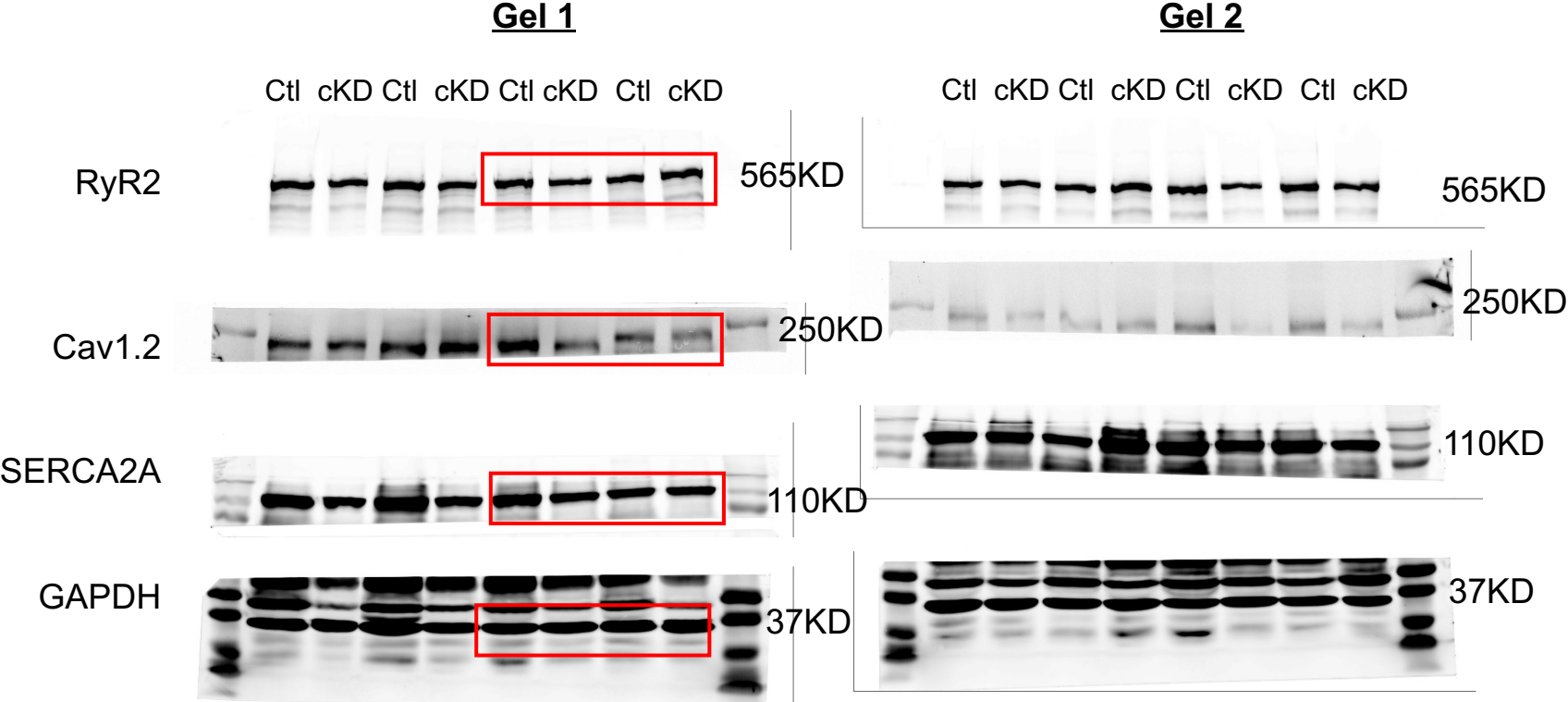


Figure S8A-B part 2

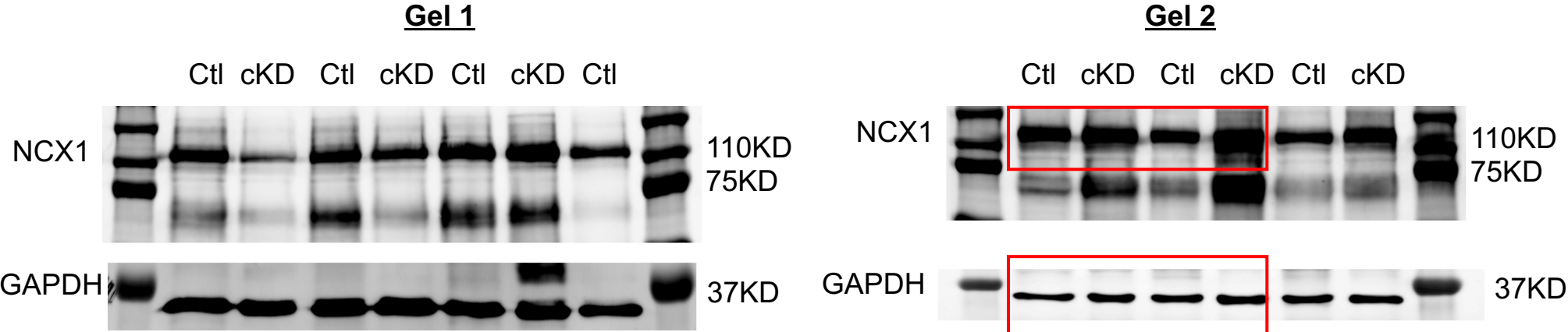


Figure S8C

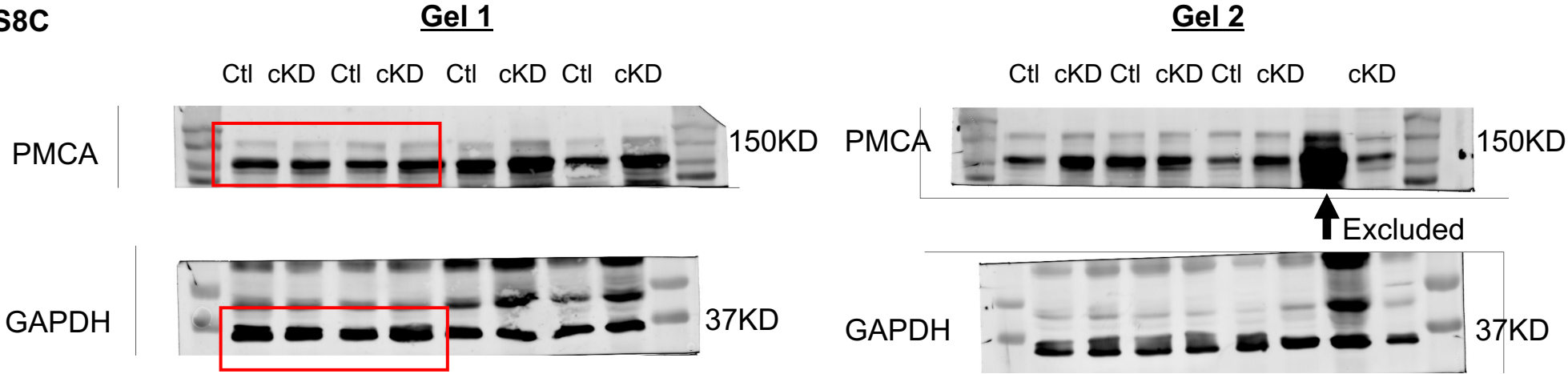


Figure S8D

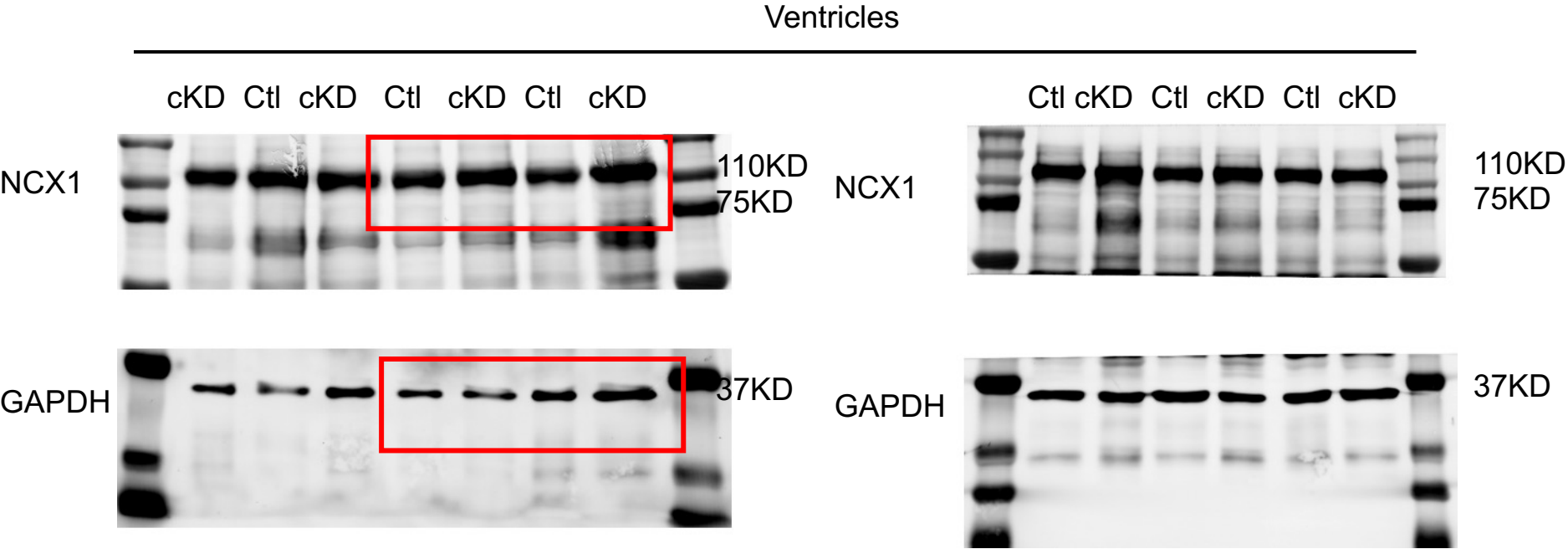
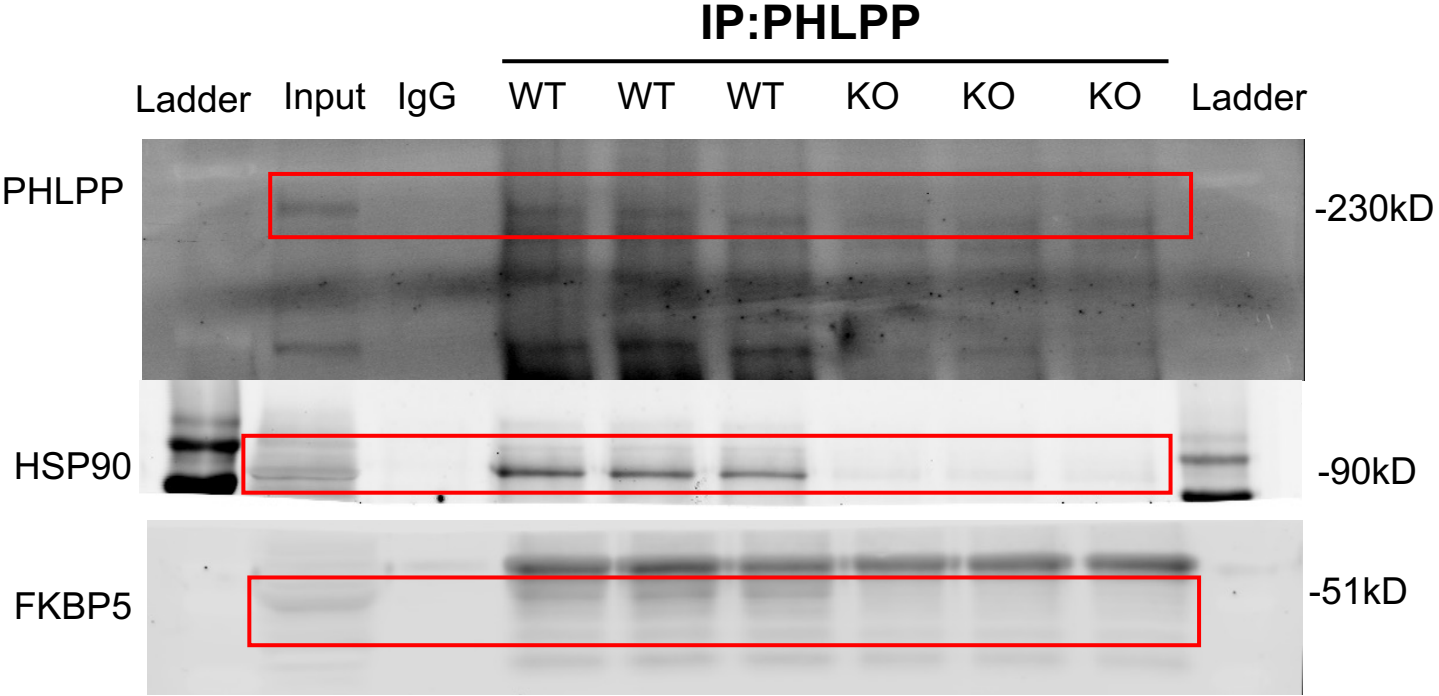


Figure S10A

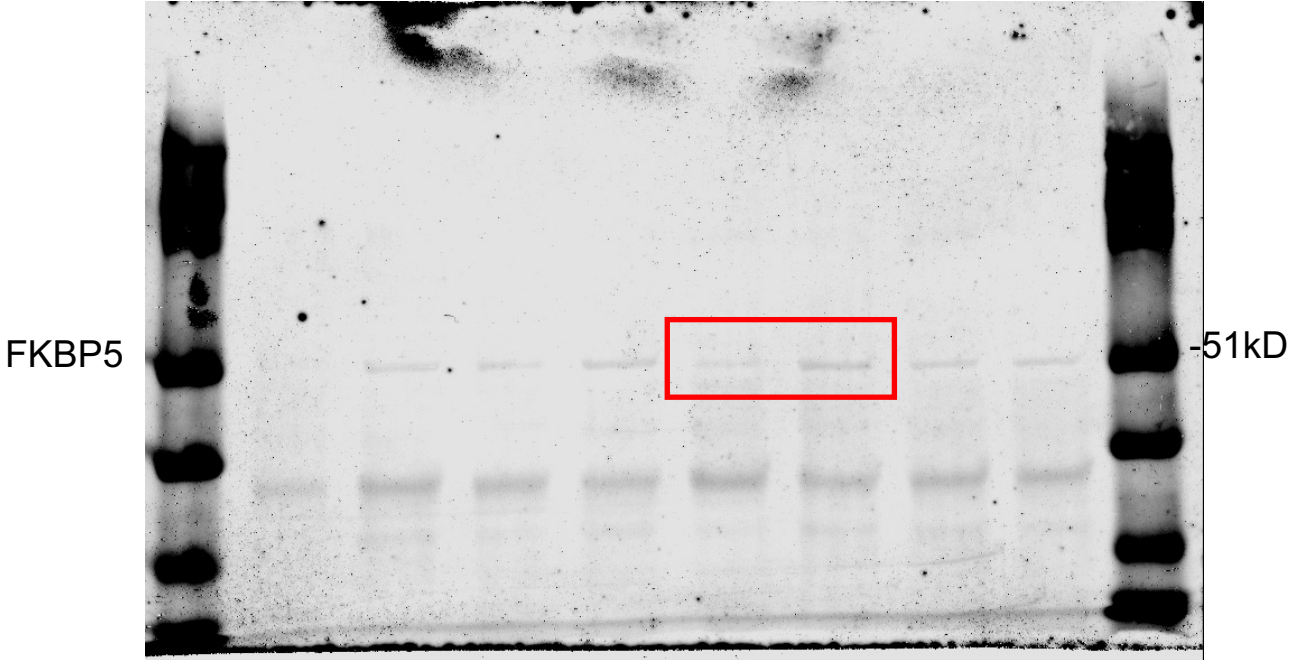


WT: Wildtype; KO: *Fkbp5*^{-/-}

Figure S11D

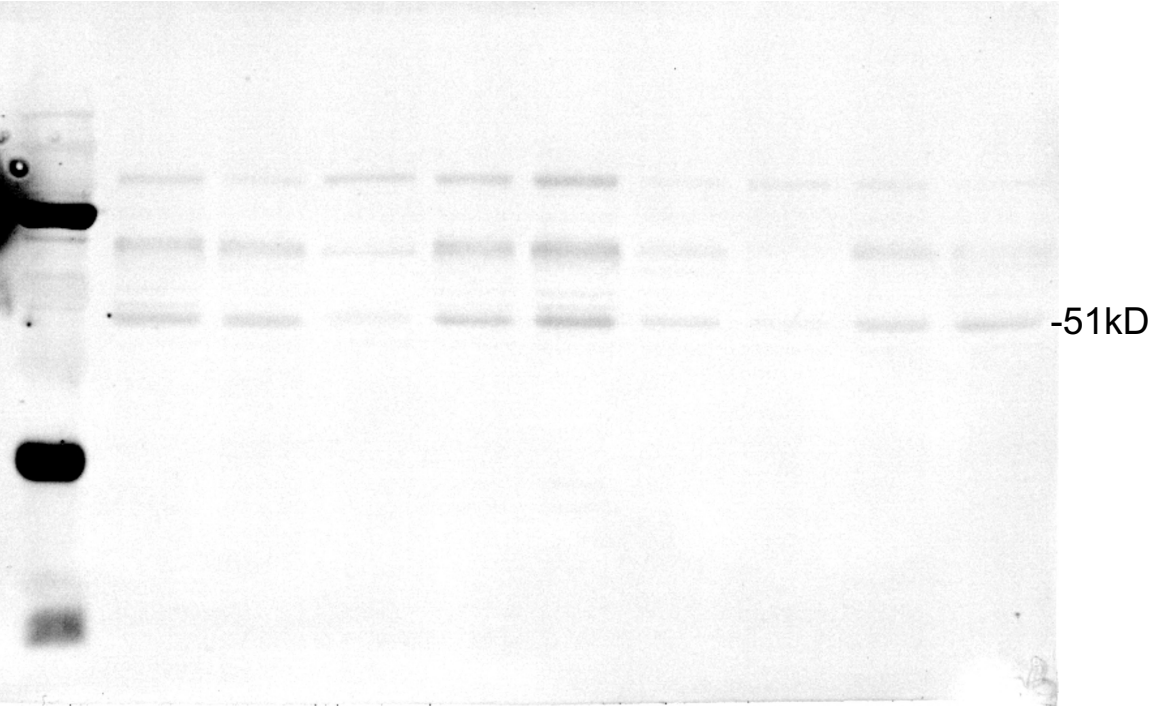
Gel 1:

AAV9-ANF (1x10¹² GC/mouse)
Flag FK5 Flag FK5 Flag FK5 Flag FK5



Gel 2:

AAV9-ANF (1x10¹² GC/mouse)
X X Flag X X FK5 Flag FK5 Flag

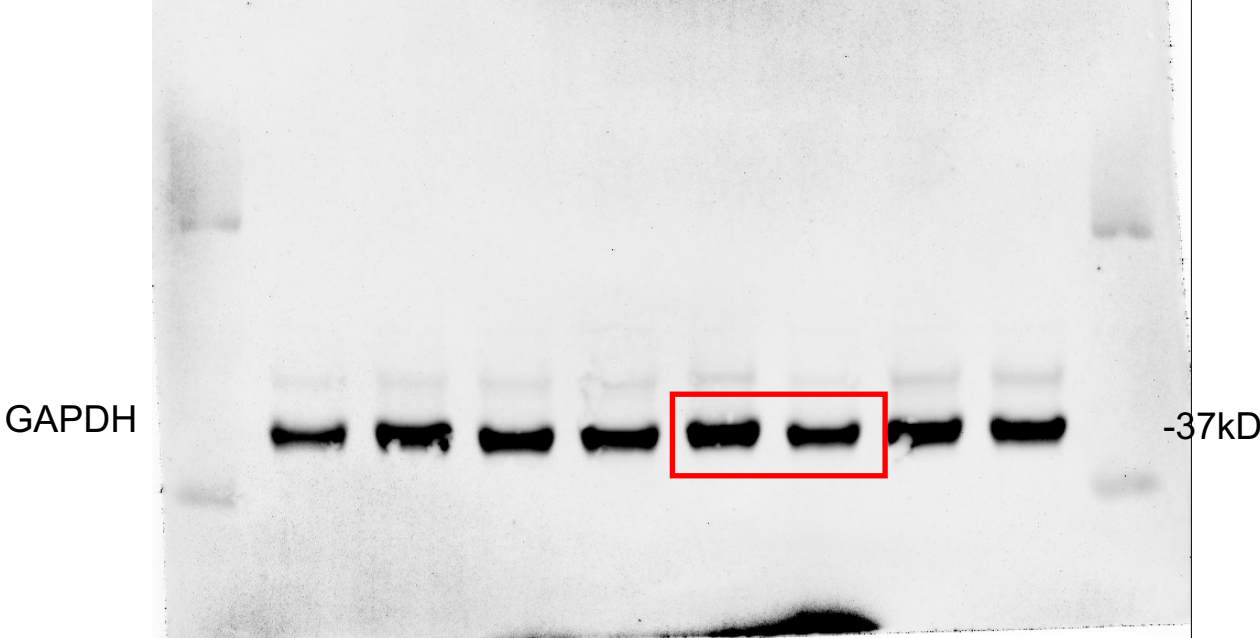


X: Wrong genotype
Not FKBP5-/- mice

Figure S11D-part 2

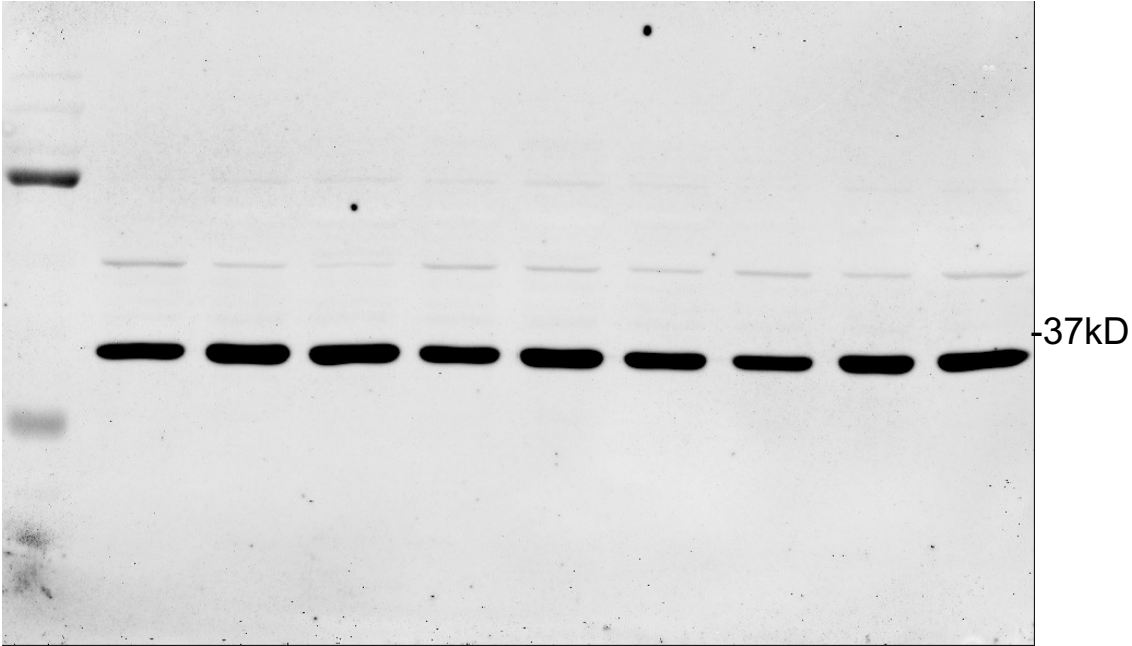
Gel 1:

AAV9-ANF (1x10¹² GC/mouse)
Flag FK5 Flag FK5 Flag FK5 Flag FK5



Gel 2:

AAV9-ANF (1x10¹² GC/mouse)
X X Flag X X FK5 Flag FK5 Flag



X: Wrong genotype
Not FKBP5^{-/-} mice

Figure S11E

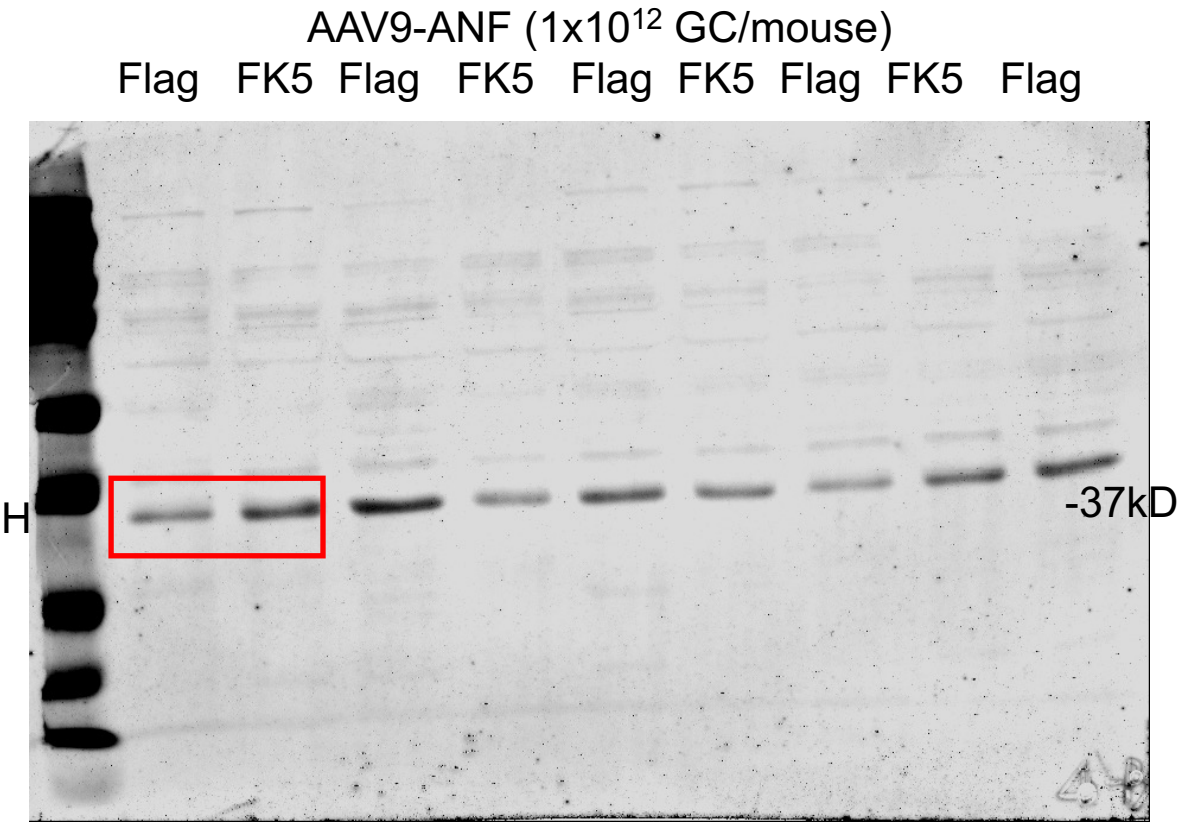
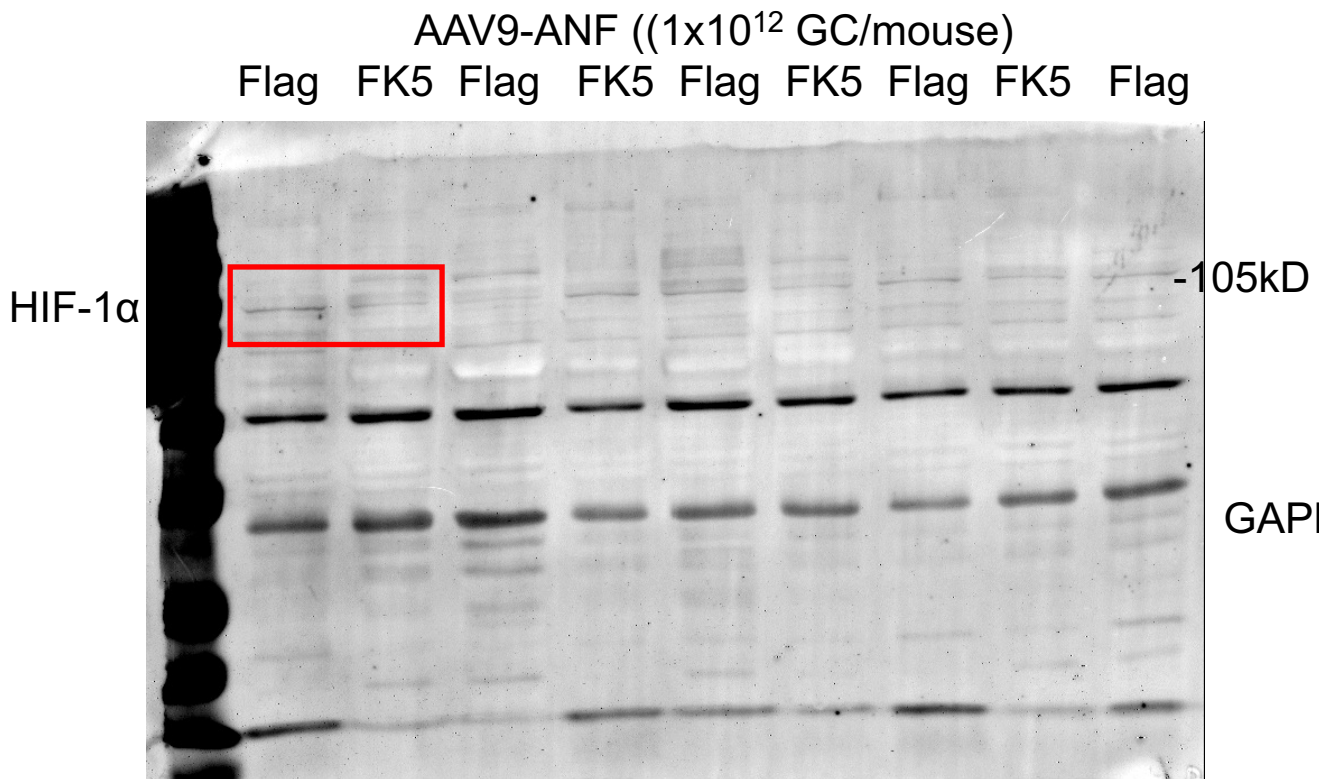
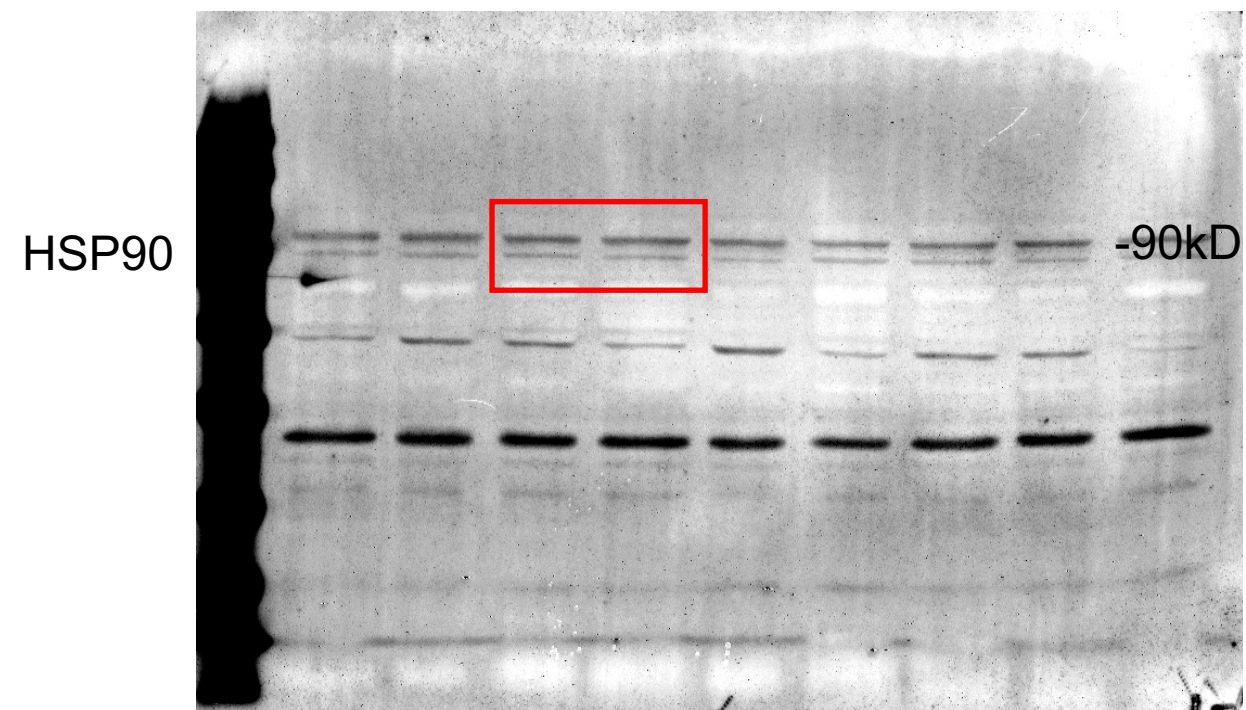


Figure S11F

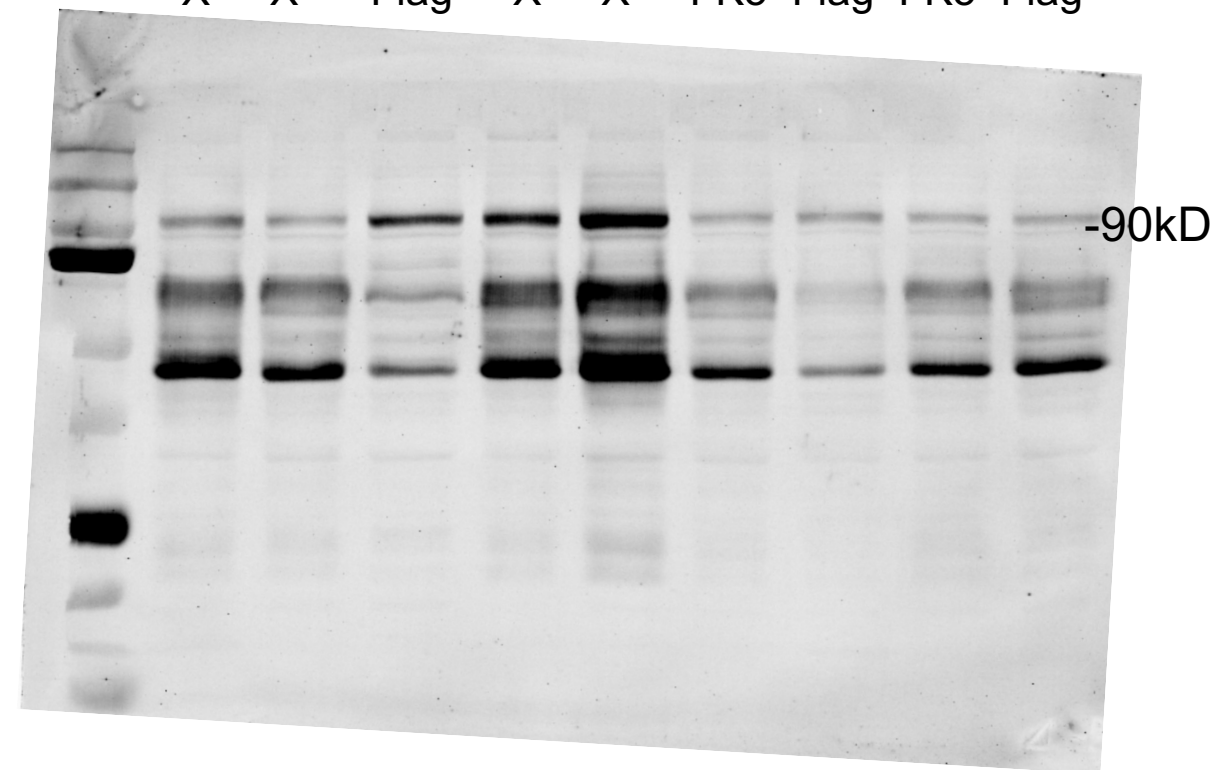
Gel 1:

AAV9-ANF ((1×10^{12} GC/mouse)
Flag FK5 Flag FK5 Flag FK5 Flag FK5



Gel 2:

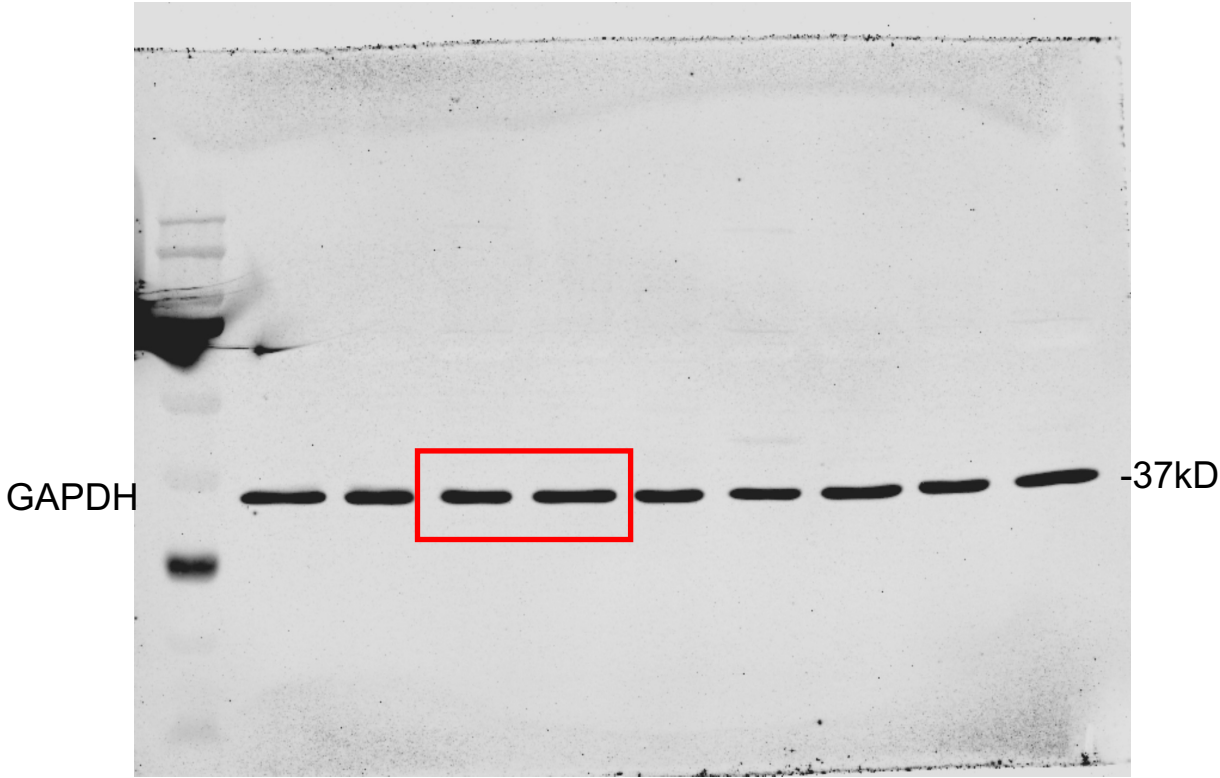
AAV9-ANF (1×10^{12} GC/mouse)
X X Flag X X FK5 Flag FK5 Flag



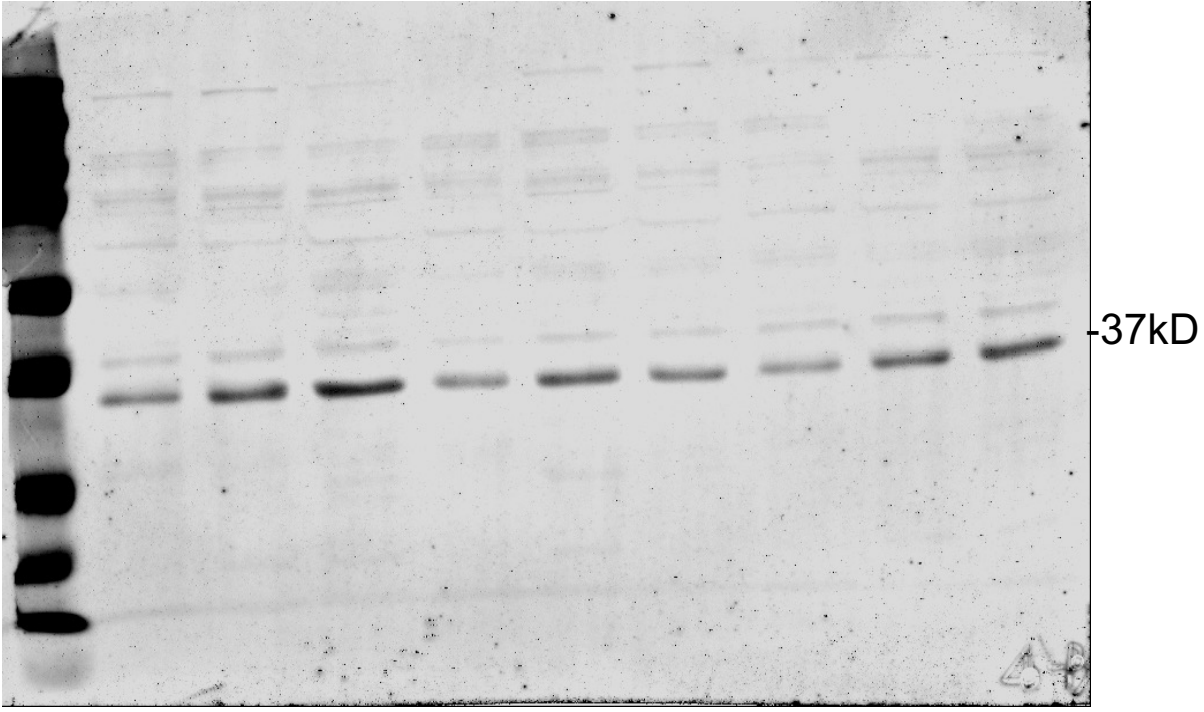
X: Wrong genotype
Not FKBP5-/- mice

Figure S11F-part 2

Gel 1: AAV9-ANF ((1x10¹² GC/mouse)
Flag FK5 Flag FK5 Flag FK5 Flag FK5



Gel 2: AAV9-ANF (1x10¹² GC/mouse)
X X Flag X X FK5 Flag FK5 Flag

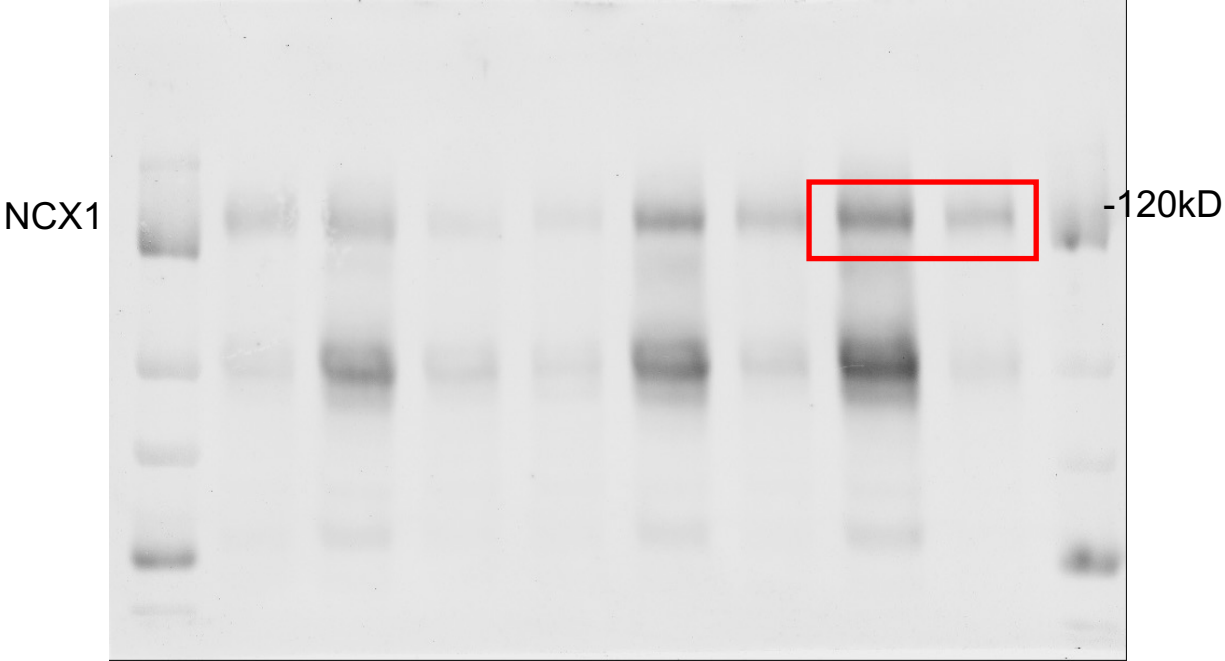


X: Wrong genotype
Not FKBP5^{-/-} mice

Figure S11G

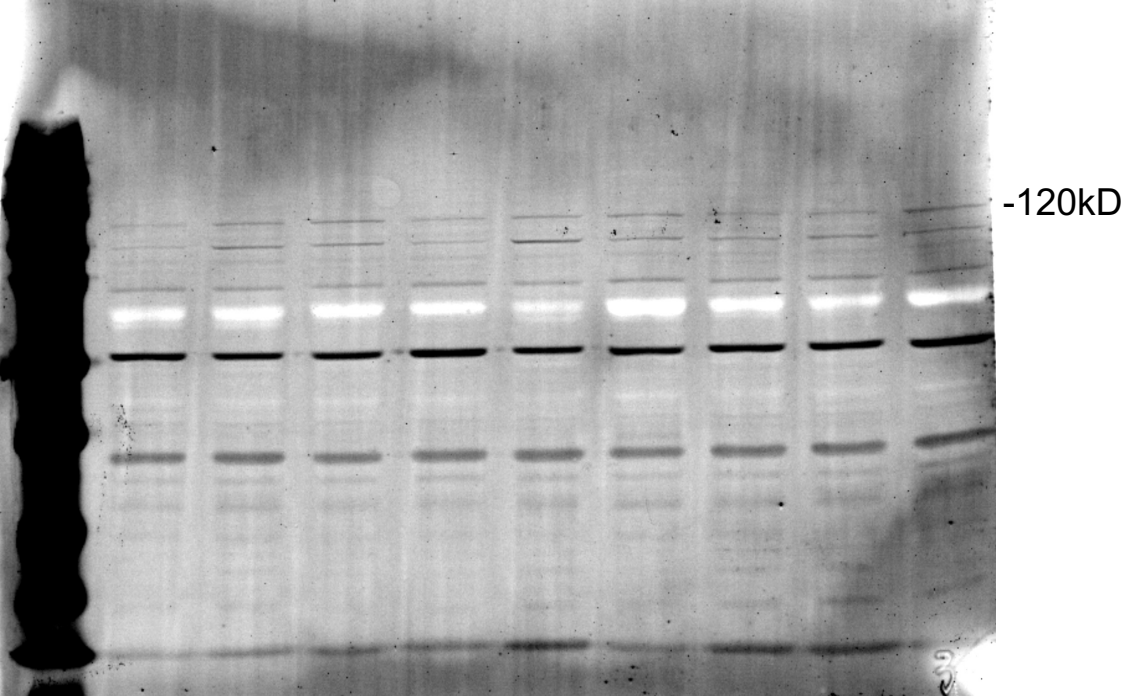
Gel 1:

AAV9-ANF ((1x10¹² GC/mouse)
Flag FK5 Flag FK5 Flag FK5 Flag FK5



Gel 2:

AAV9-ANF (1x10¹² GC/mouse)
X X Flag X X FK5 Flag FK5 Flag

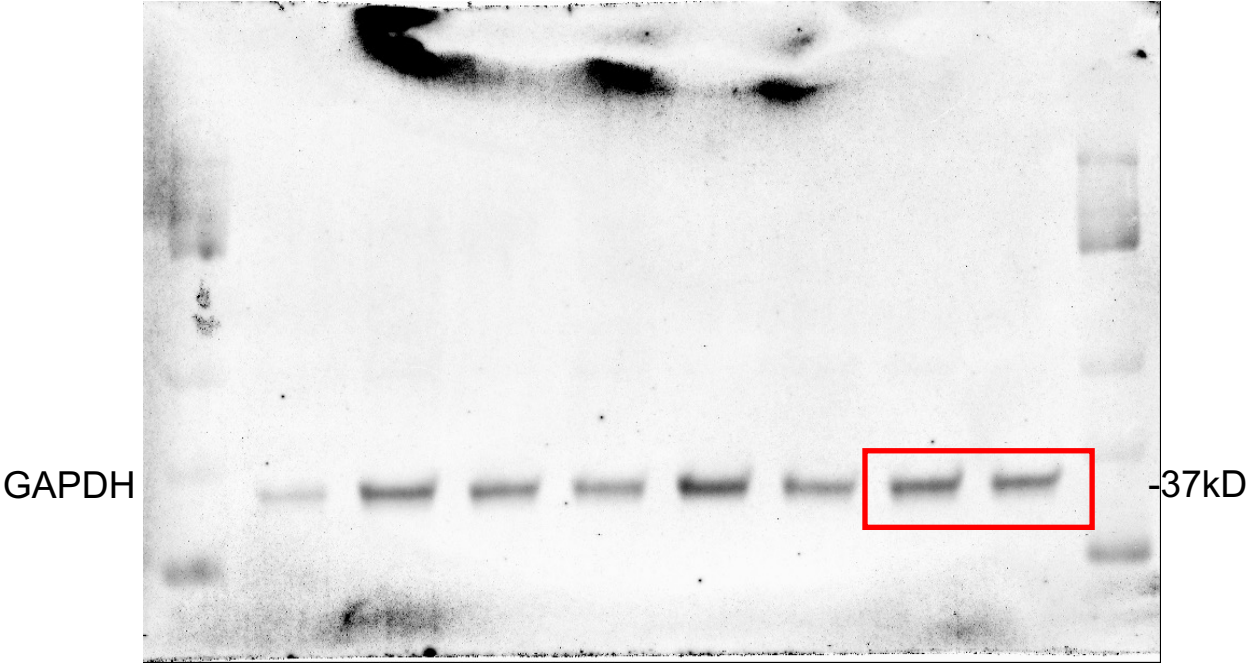


X: Wrong genotype
Not FKBP5^{-/-} mice

Figure S11G –part 2

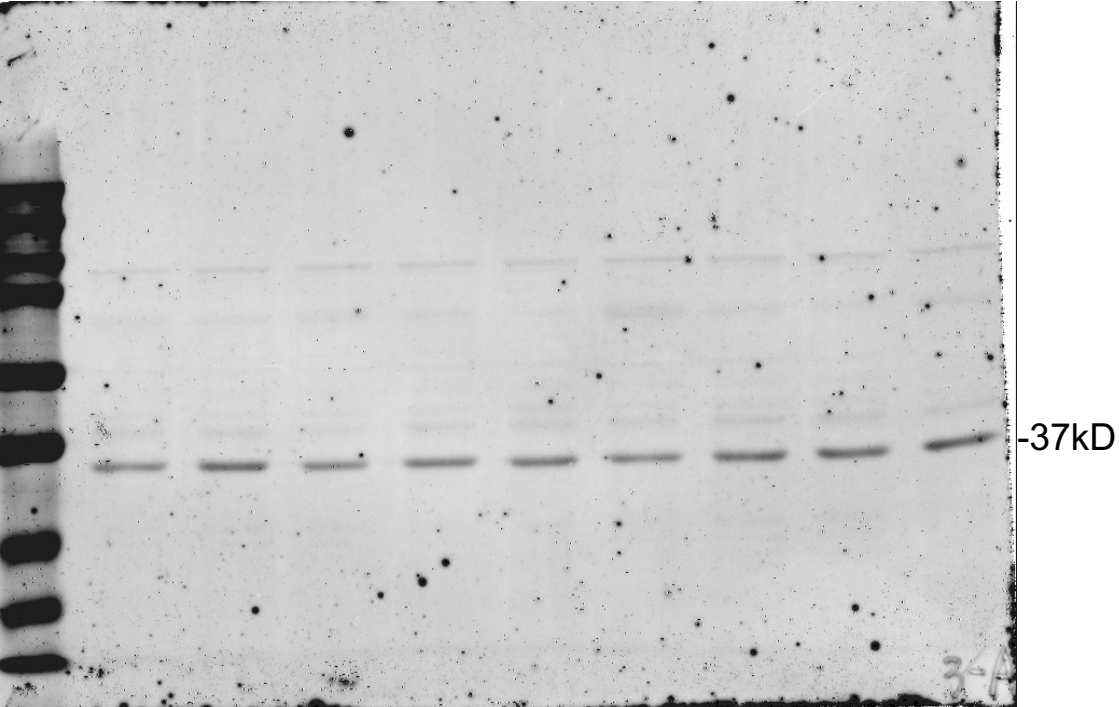
Gel 1:

AAV9-ANF ((1x10¹² GC/mouse)
Flag FK5 Flag FK5 Flag FK5 Flag FK5



Gel 2:

AAV9-ANF (1x10¹² GC/mouse)
X X Flag X X FK5 Flag FK5 Flag



X: Wrong genotype
Not FKBP5^{-/-} mice