

Supplementary Information

Differential effects of EPA and DHA on aging-related sarcopenia in mice and possible mechanisms involved

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Table S1 Ingredients and composition of experimental diets.

Table S2 Antibodies for Western blotting used in this study.

Table S3 Sequences of primers used for qRT-PCR.

Figure S1 Original Western blotting images presented in this study.

Table S1 Ingredients and composition of experimental diets

	Young	Aged	Aged+EPA	Aged+DHA
Ingredient (g/kg)				
Soybean oil	40	40	30	30
EPA	-	-	10	-
DHA	-	-	-	10
Cornstarch	495.7	495.7	495.7	495.7
Maltodextrin 10	125	125	125	125
Casein	140	140	140	140
Sucrose	100	100	100	100
AIN-93 mineral mixture	35	35	35	35
AIN-93 vitamin mixture	10	10	10	10
L-Cystine	1.8	1.8	1.8	1.8
Choline bitartrate	2.5	2.5	2.5	2.5
Cellulose	50	50	50	50

Table S2 Antibodies for Western blotting and Immunofluorescence used in this study

Antibody	Source	Venodr	Catalog No.	Dilution
Akt	Rabbit	Cell Signaling Technology	4691	1:1 000
Phospho-Akt (Ser473)	Rabbit	Cell Signaling Technology	4060	1:1 000
AMPK	Rabbit	Cell Signaling Technology	5831s	1:1 000
Phospho-AMPK (Thr172)	Rabbit	Cell Signaling Technology	2535s	1:1 000
ATF4	Mouse	Santa Cruz	sc-390063	1:1 000
Bax	Rabbit	proteintech	50599-2-Ig	1:2 000
Bcl-2	Rabbit	proteintech	26593-1-AP	1:1 000
CHOP	Mouse	Affinity	AF6277	1:1 000
Cleaved Caspase-3	Rabbit	Cell Signaling Technology	9664s	1:1 000
Drp1	Mouse	Santa Cruz	sc-271583	1:1 000
eIF2 α	Mouse	Affinity	AF6087	1:1 000
Phospho-eIF2 α (Ser51)	Mouse	Affinity	AF3087	1:1 000
4E-BP1	Rabbit	Abclonal	A1248	1:1 000
Phospho-4E-BP1	Rabbit	Abclonal	AP0030	1:1000
Fis1	Mouse	Santa Cruz	sc-376447	1:1 000
FoxO3a	Rabbit	Cell Signaling Technology	12829	1:1 000
Phospho-FoxO3a (Ser253)	Rabbit	Cell Signaling Technology	13129	1:1 000
GAPDH	Rabbit	Cell Signaling Technology	2118	1:1 000
LC3	Rabbit	Cell Signaling Technology	12741s	1:1 000
MAFbx	Mouse	Santa Cruz	sc-166806	1:1 000
Mfn2	Mouse	Santa Cruz	sc-515647	1:1 000
mTOR	Rabbit	Cell Signaling Technology	2983	1:1 000
Phospho-mTOR (Ser2448)	Rabbit	Cell Signaling Technology	5536	1:1 000
MuRF1	Mouse	Santa Cruz	sc-398608	1:1 000
MyoD	Mouse	Santa Cruz	sc-377460	1:1 000
NF- κ B p65	Rabbit	Cell Signaling Technology	8242	1:1 000
Phospho-NF- κ B p65 (Ser536)	Rabbit	Cell Signaling Technology	3033	1:1 000
NRF1	Mouse	Santa Cruz	sc-101102	1:1 000
NRF2	Mouse	Santa Cruz	sc-28312	1:1 000
Opal	Rabbit	Affinity	DF8587	1:1 000
p62	Rabbit	Cell Signaling Technology	23214s	1:1 000
p70S6K	Rabbit	Cell Signaling Technology	9202	1:1 000
Phospho-p70S6K (Thr389)	Rabbit	Cell Signaling Technology	9234	1:1 000
Parkin	Mouse	Santa Cruz	sc-32282	1:1 000
PERK	Mouse	Affinity	AF5304	1:1 000
Phospho-PERK (Thr982)	Mouse	Affinity	DF7576	1:1 000
PGC-1 α	Mouse	Proteintech	66369-1-Ig	1:1 000
PI3K p85	Rabbit	Cell Signaling Technology	4257	1:1 000
Phospho-PI3K p85 (Tyr458)	Rabbit	Cell Signaling Technology	17366	1:1 000

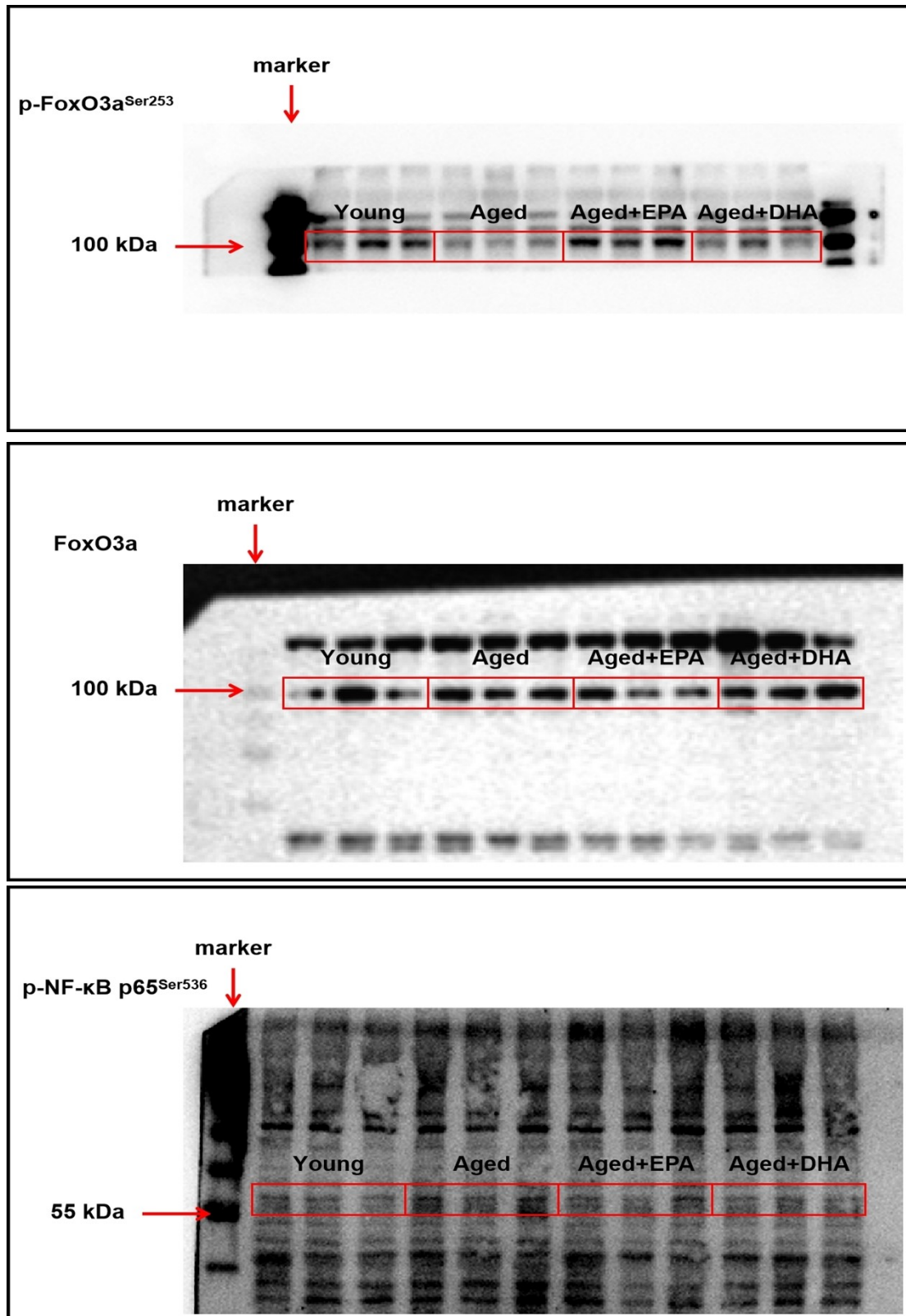
PINK1	Mouse	Santa Cruz	sc-517353	1:1 000
TFAM (mtTFA)	Mouse	Santa Cruz	sc-166965	1:1 000
VDAC	Mouse	Santa Cruz	sc-390996	1:1 000
Anti-rabbit HRP-linked antibody	Goat	Cell Signaling Technology	7074	1:10 000
Anti-mouse HRP-linked antibody	Goat	Proteintech	PR30009	1:10 000

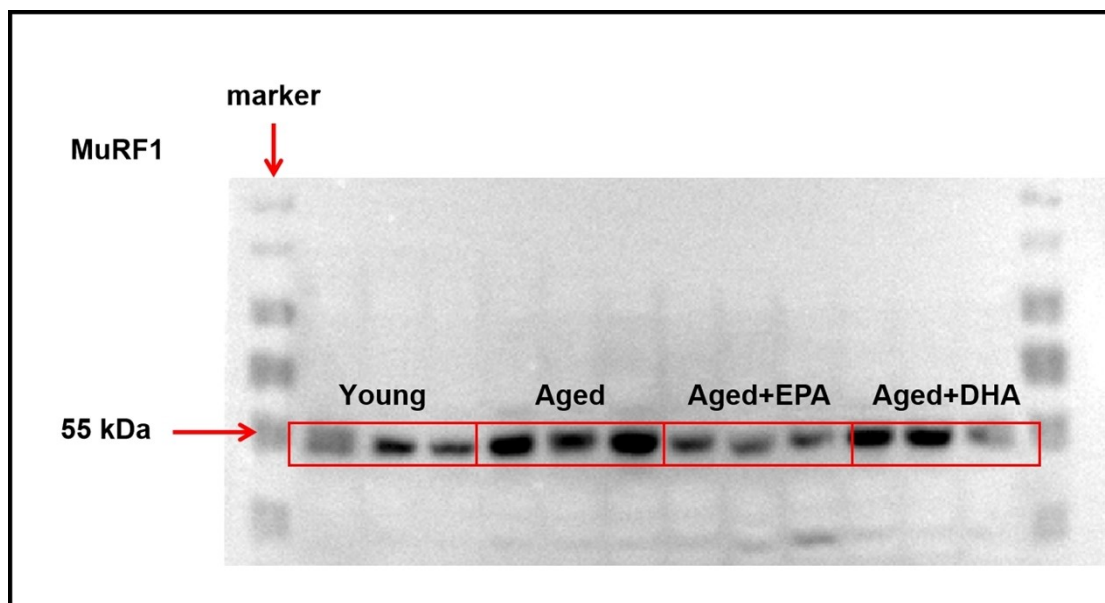
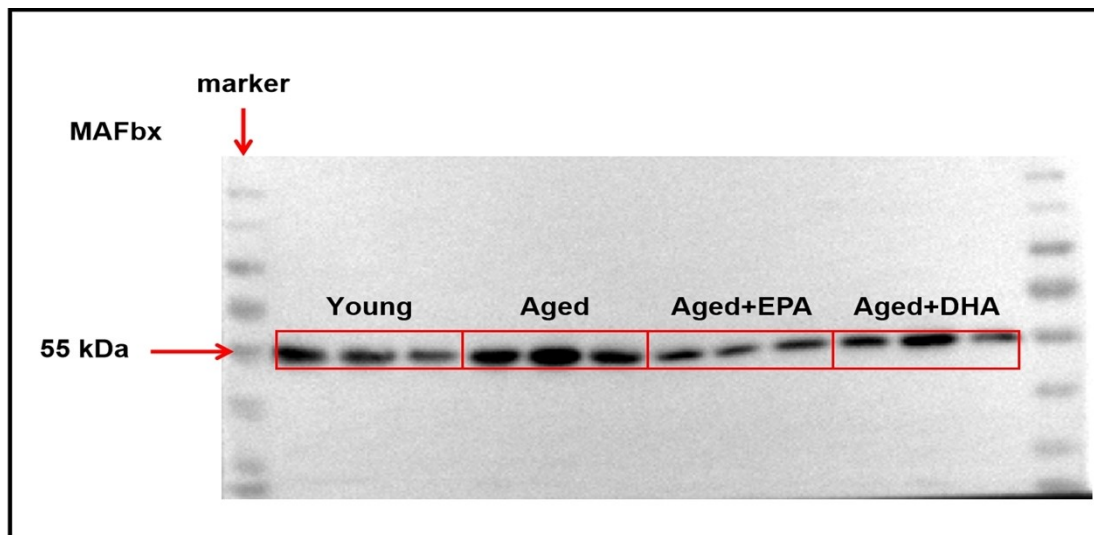
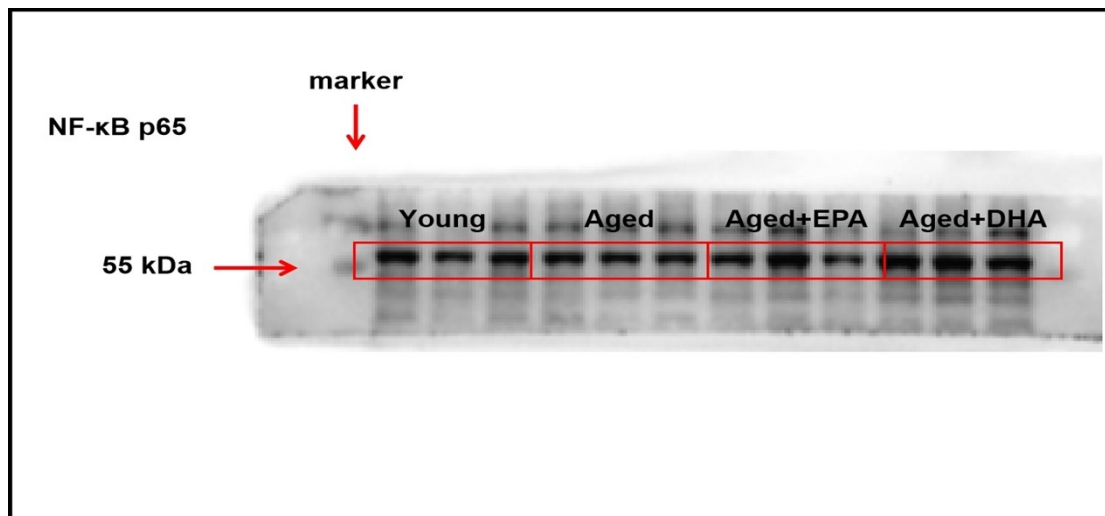
Table S3 Sequences of primers used for qRT-PCR

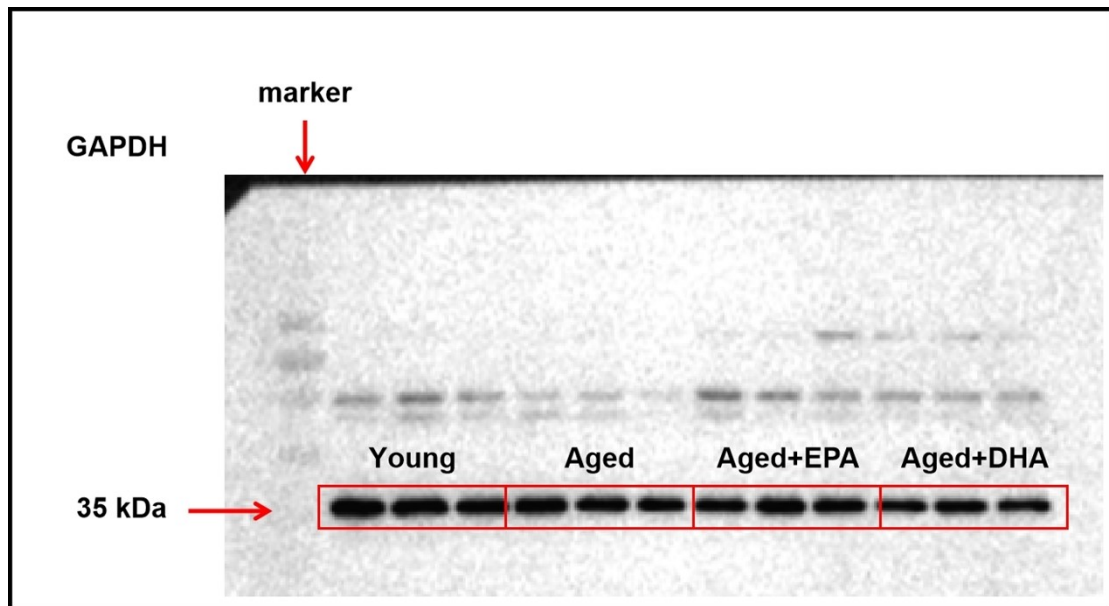
Targeted Gene	Sequences (5'-3')
<i>HK2</i>	Forward 5'- GCC AGC CTC TCC TGA TTT TAG TGT-3' Reverse 5'- GGG AAC ACA AAA GAC CTC TTC TGG-3'.
<i>ND1</i>	Forward 5'-CTA GCA GAA ACA AAC CGG GC-3' Reverse 5'- CCG GCT GCG TAT TCT ACG TT-3'.

Figure S1 Original Western blotting images presented in this study.

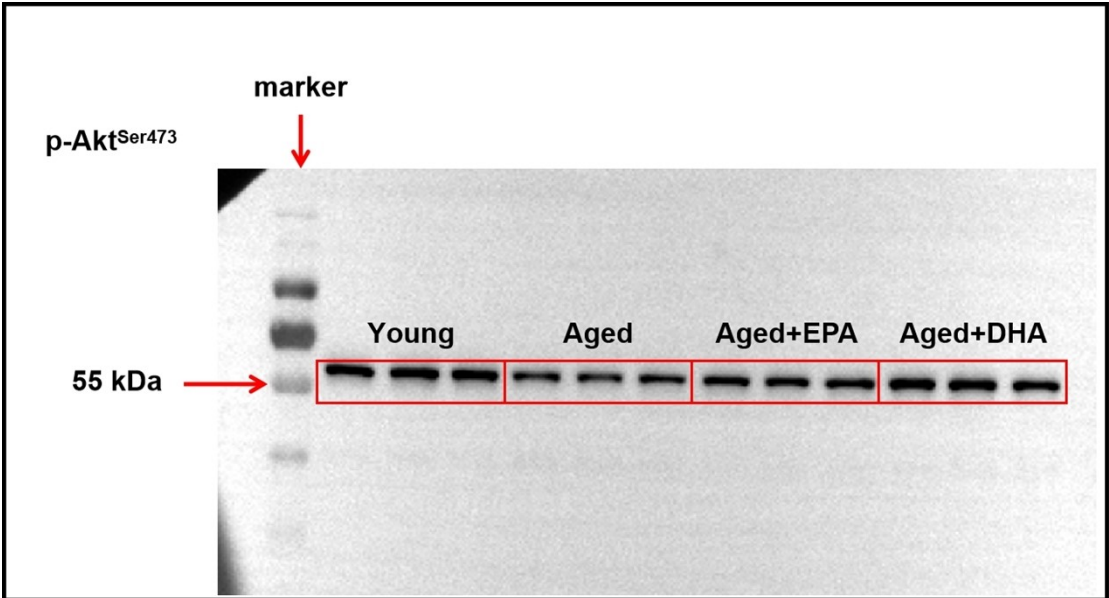
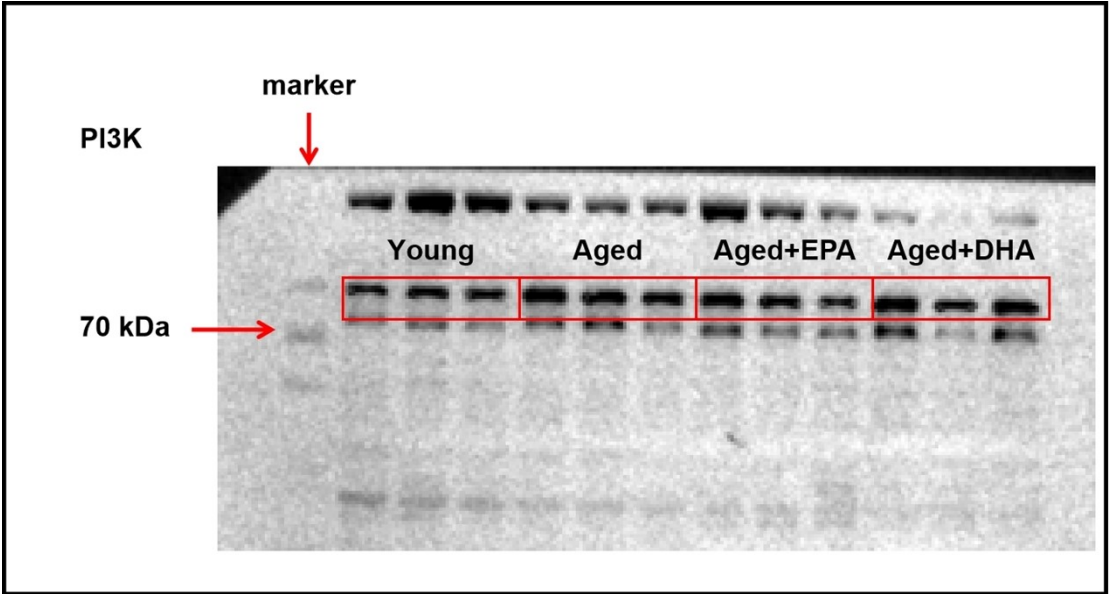
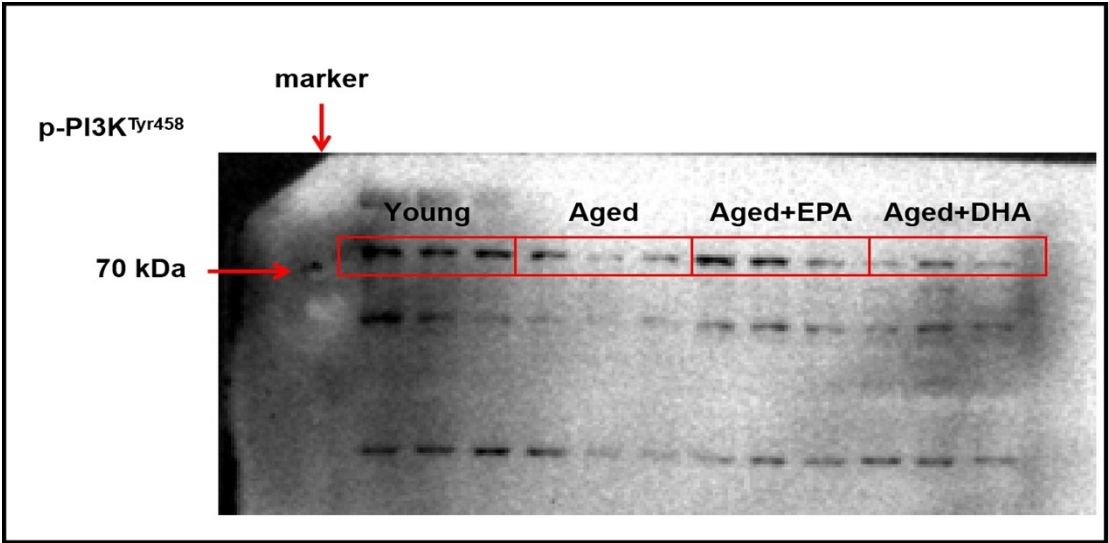
Uncropped blots for Figure 3A

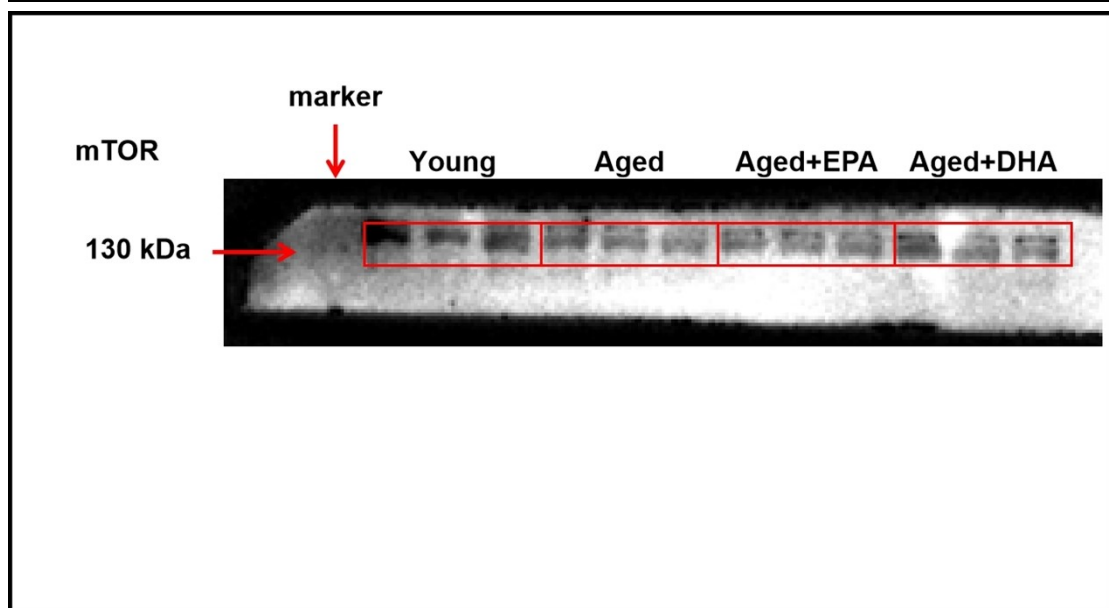
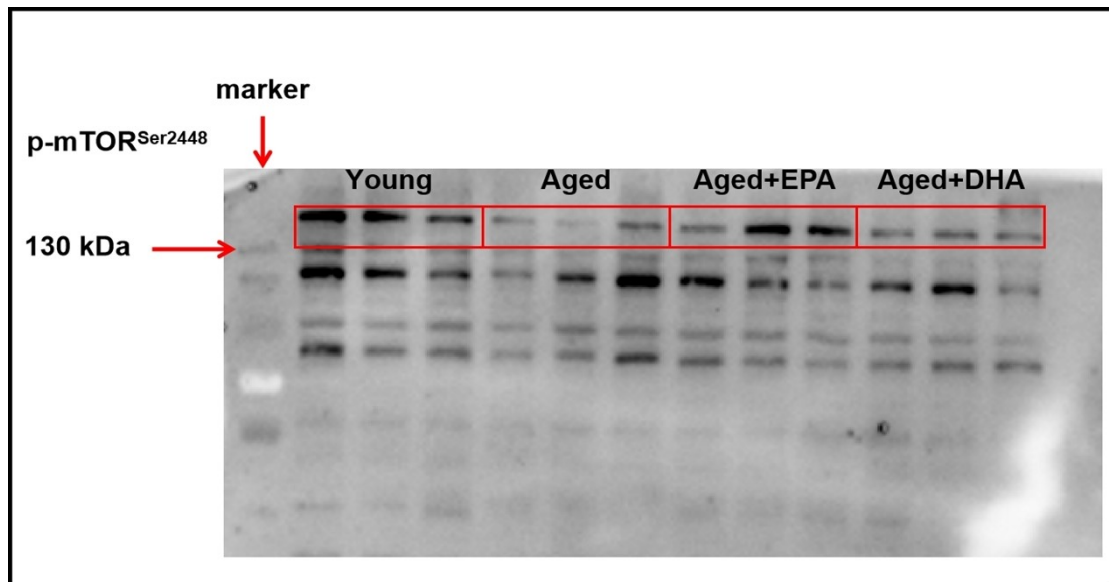
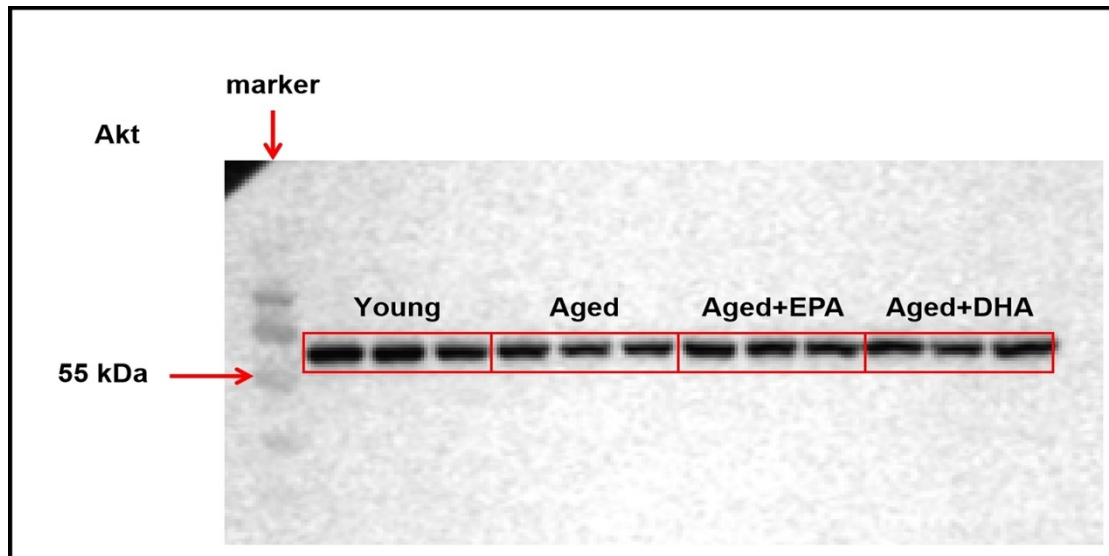


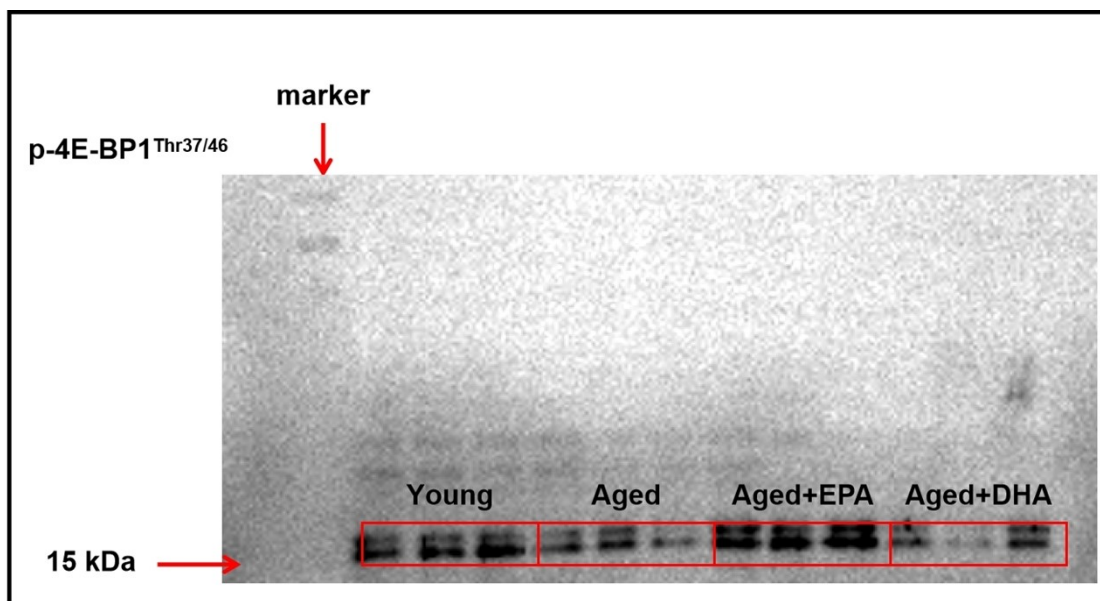
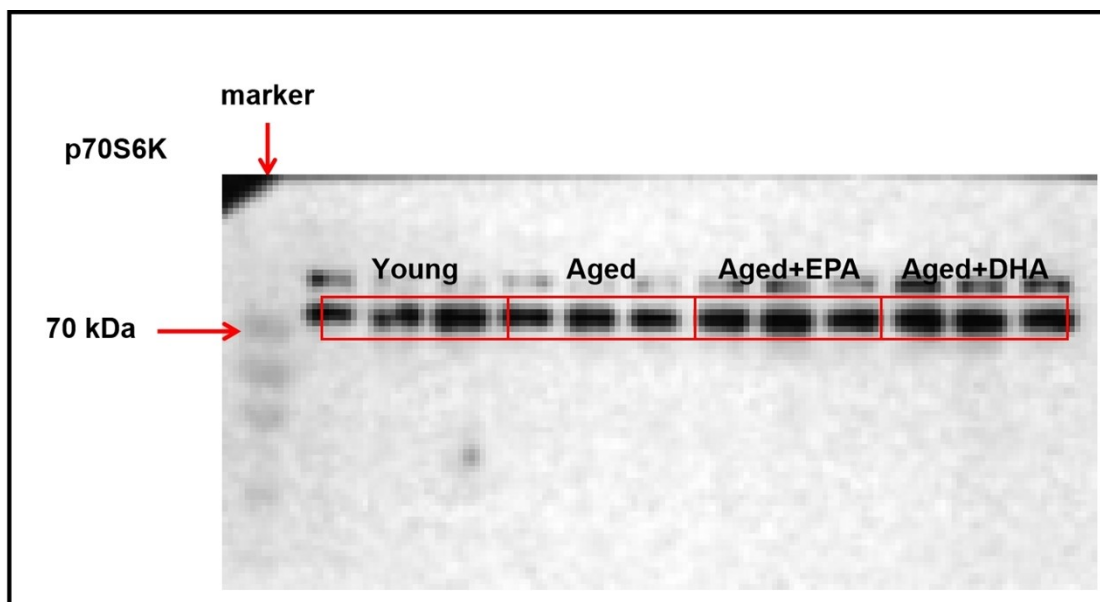
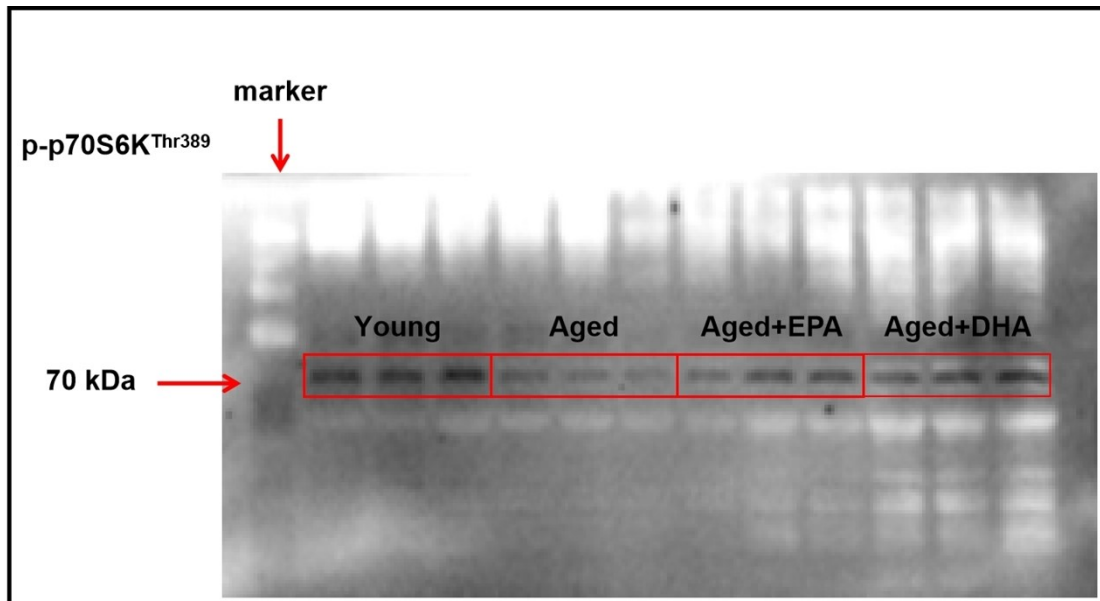


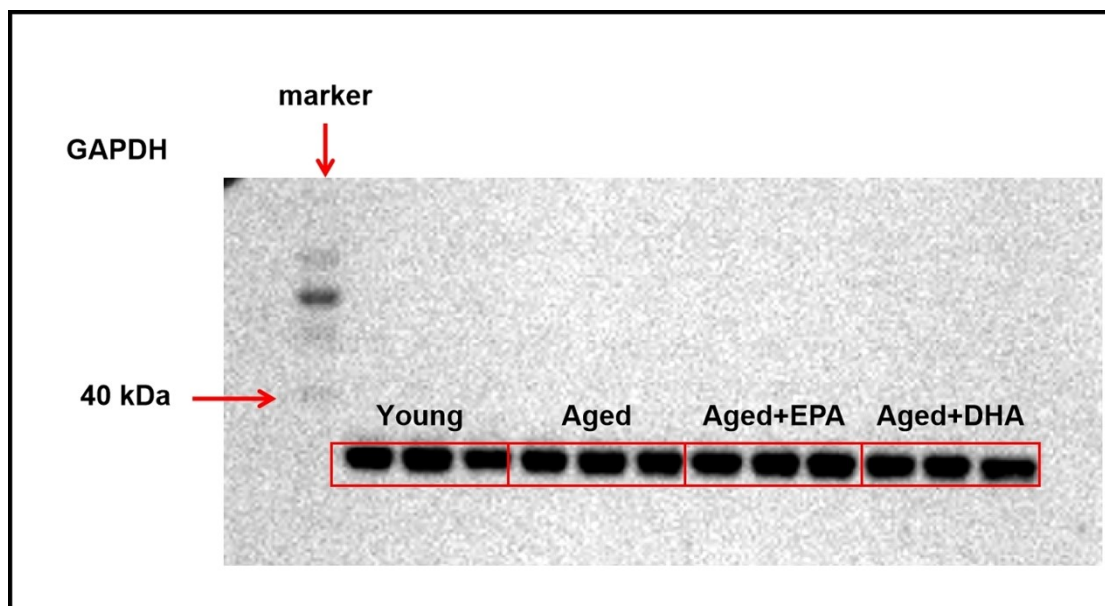
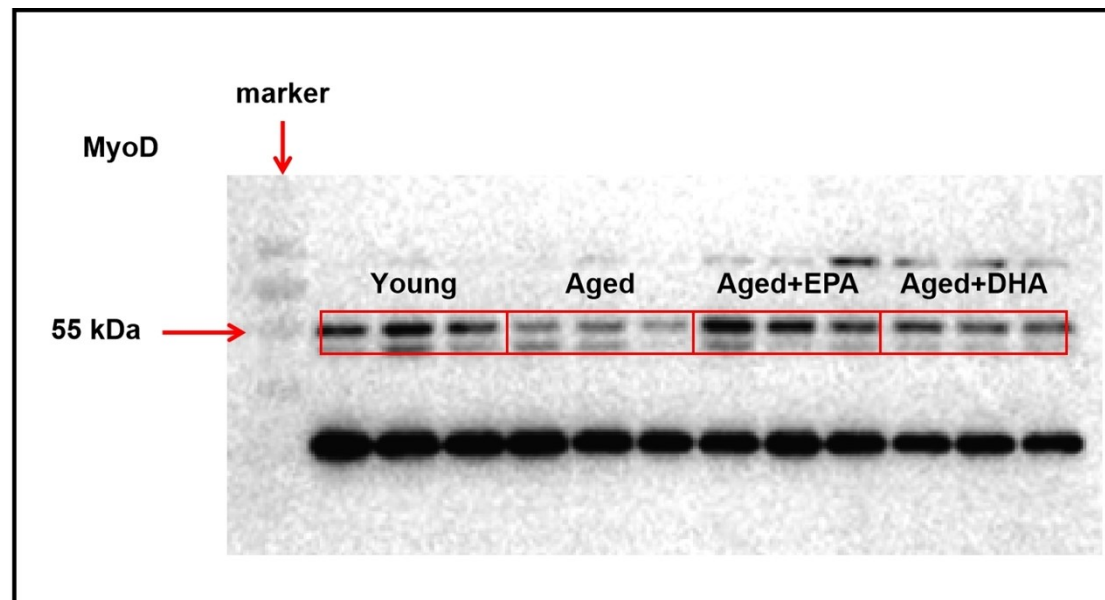
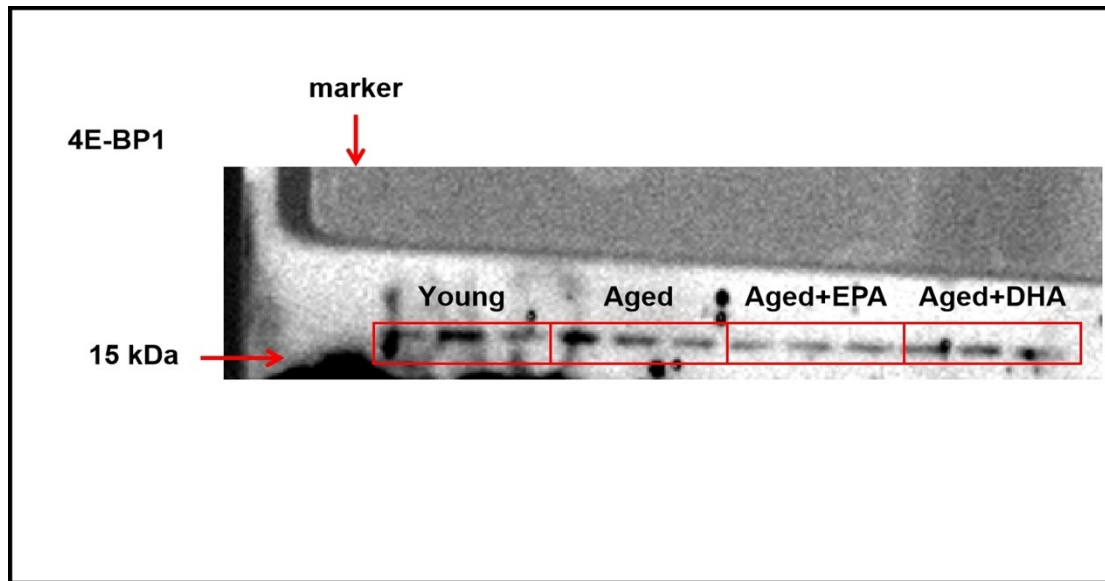


Uncropped blots for Figure 4A

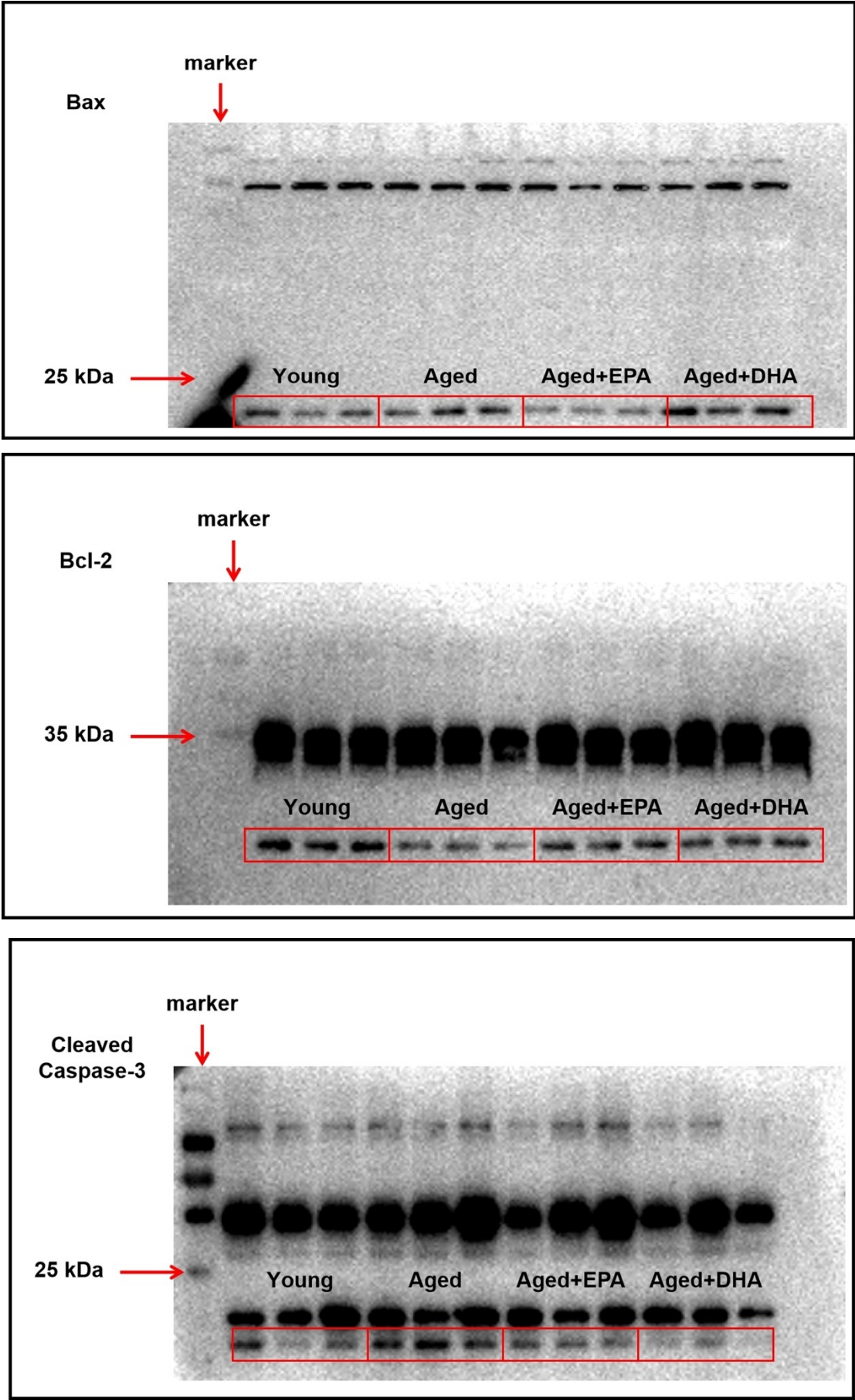


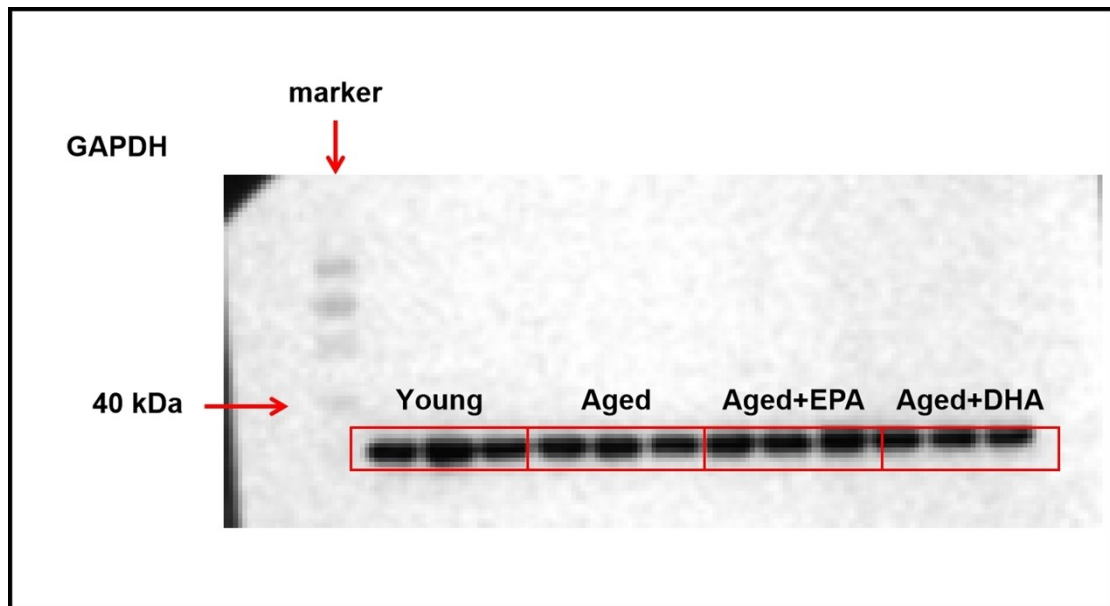




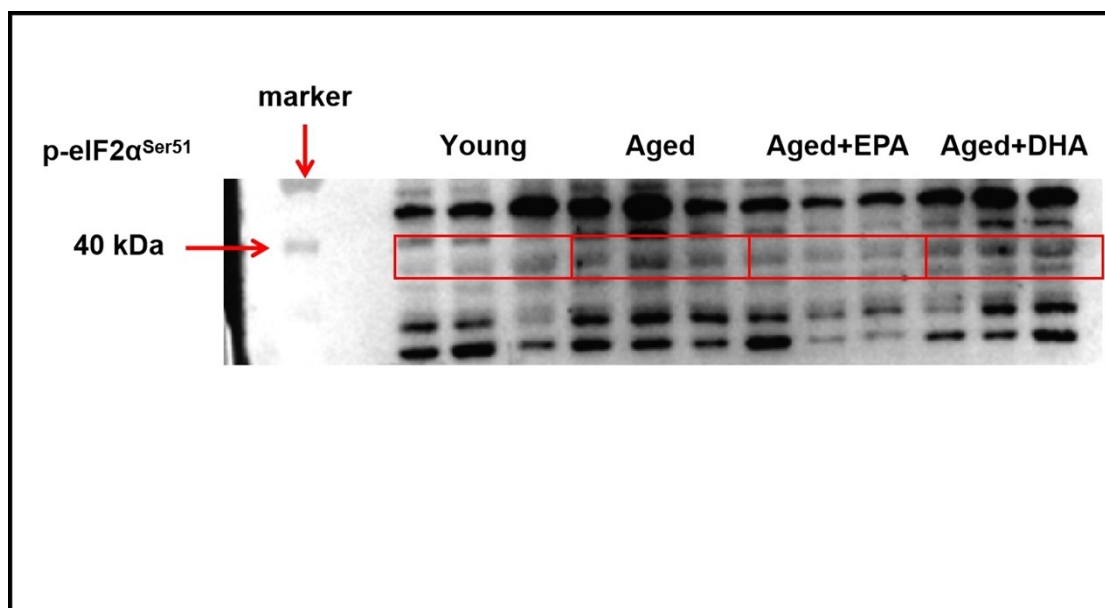
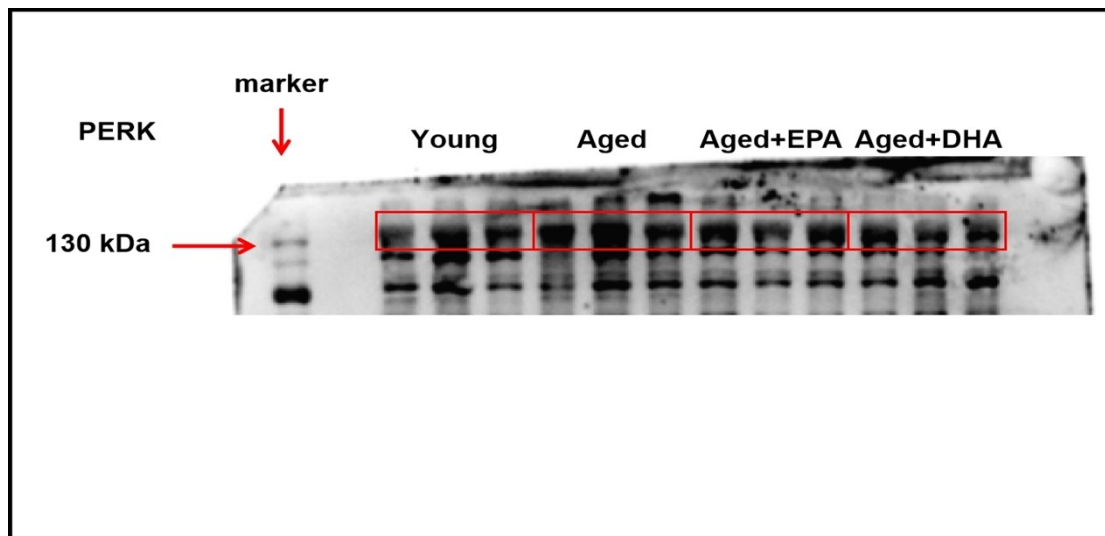
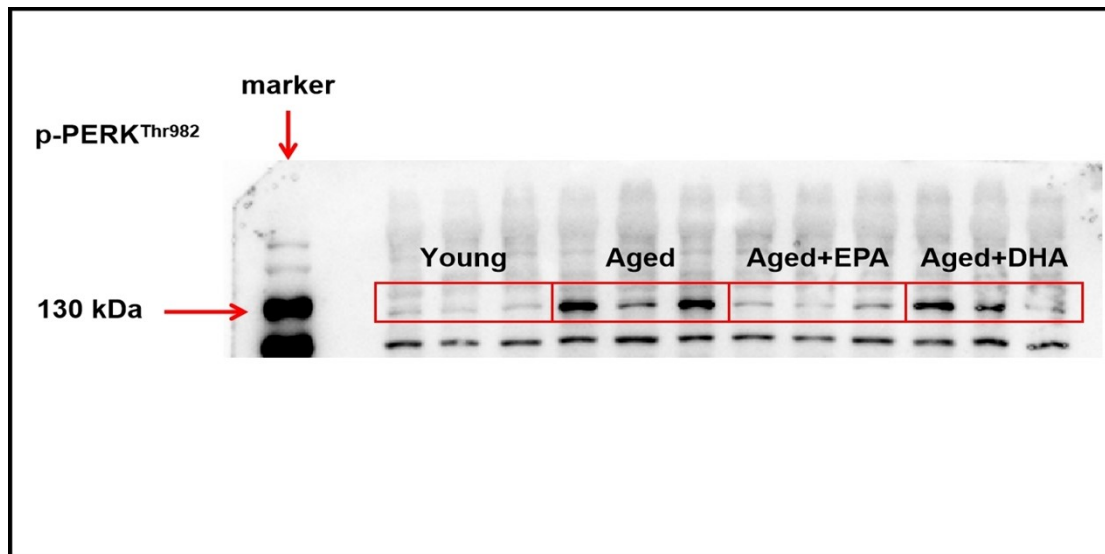


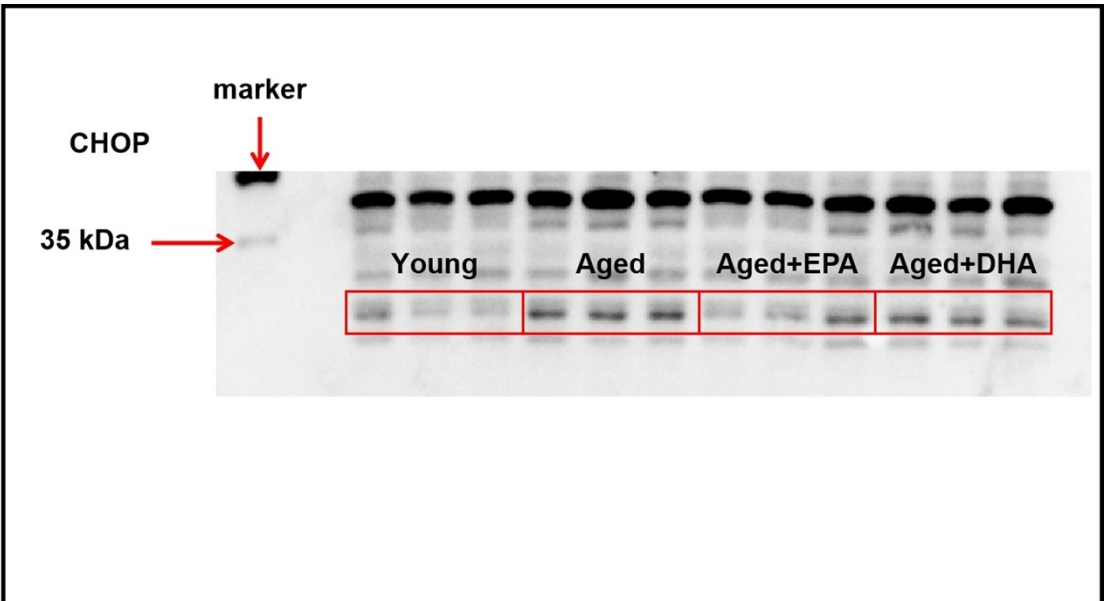
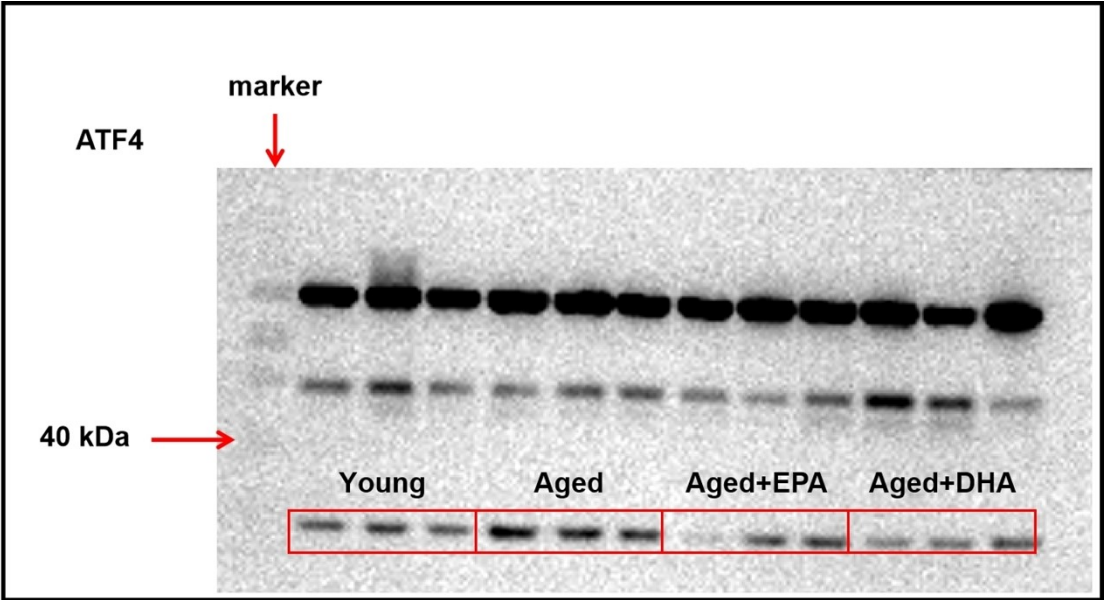
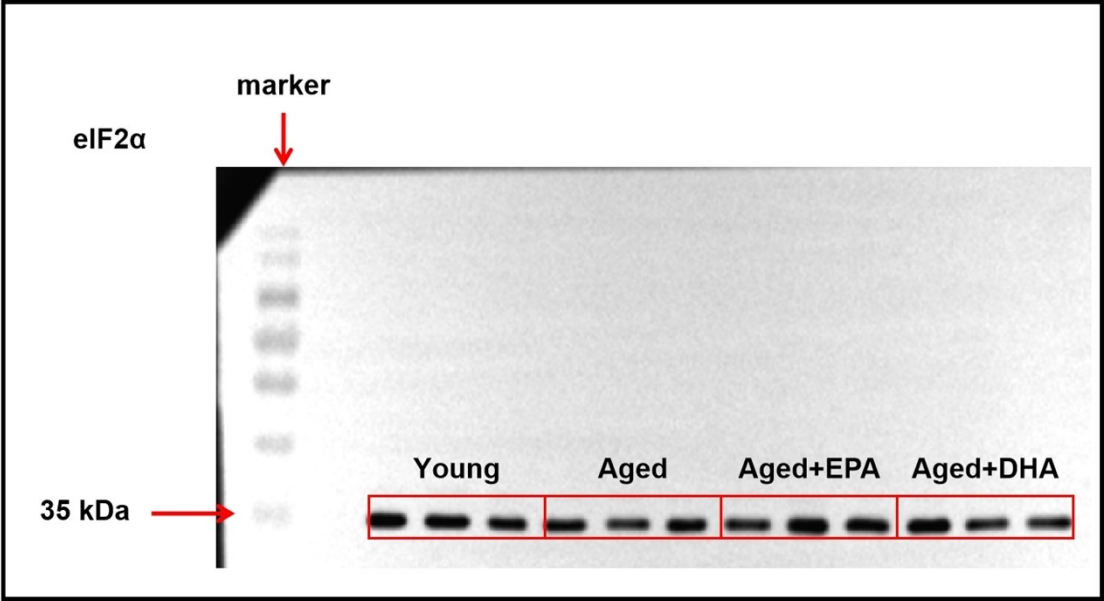
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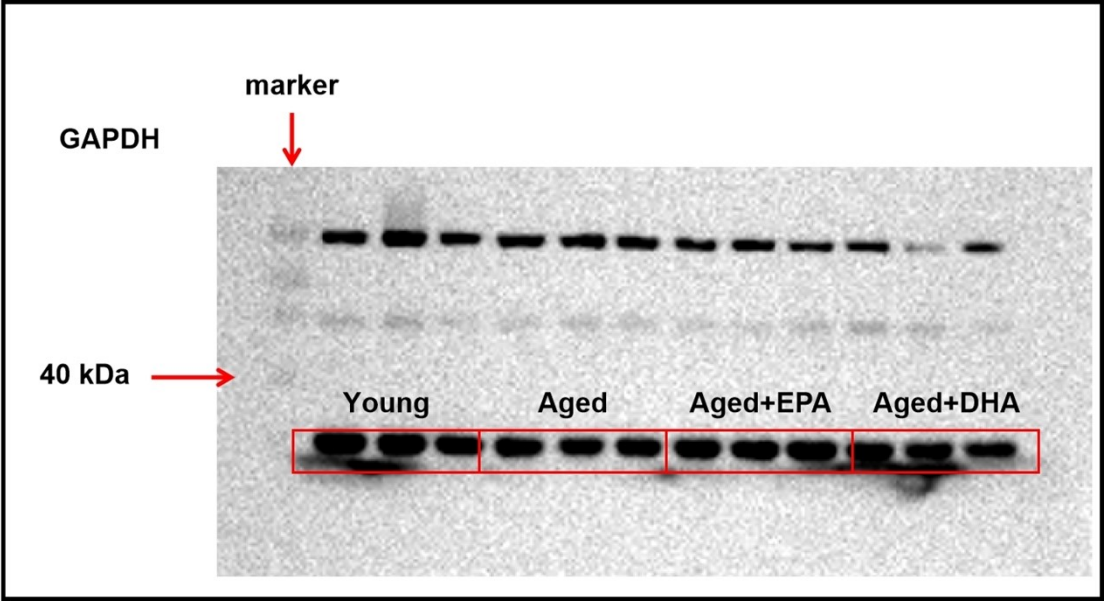




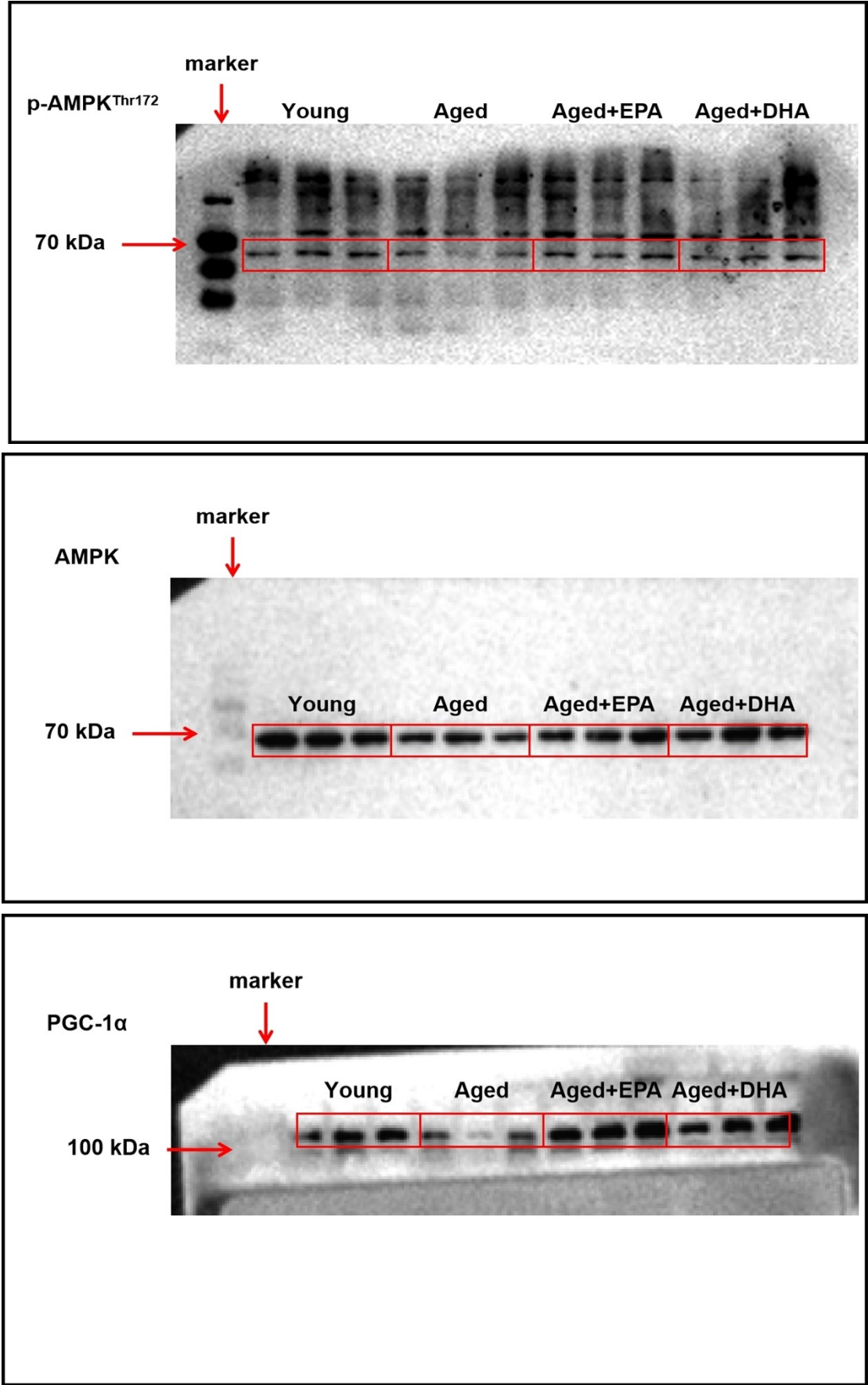
Uncropped blots for Figure 6A

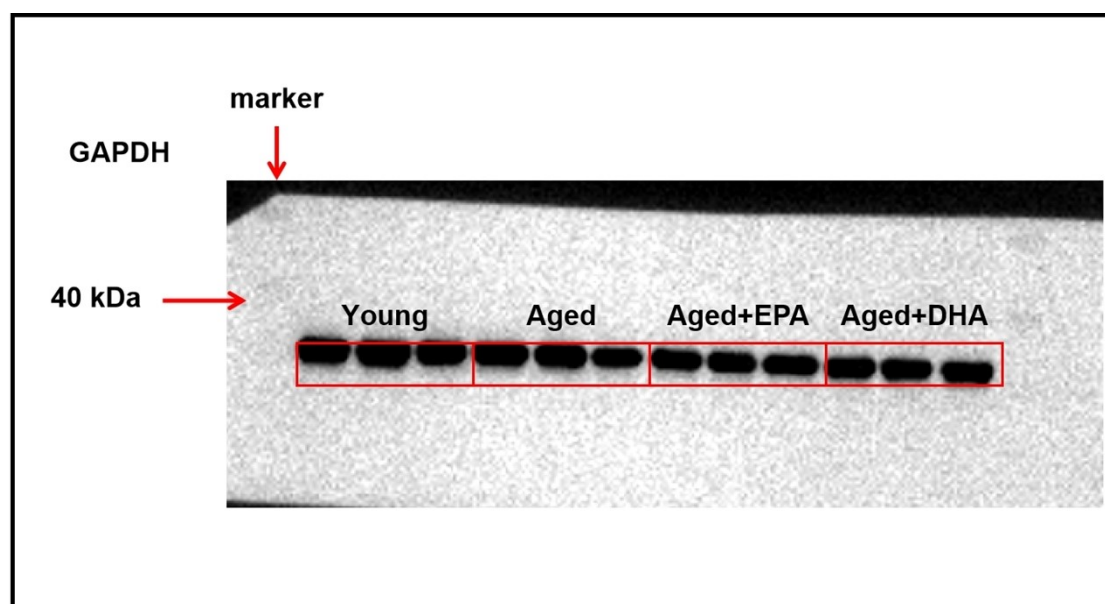
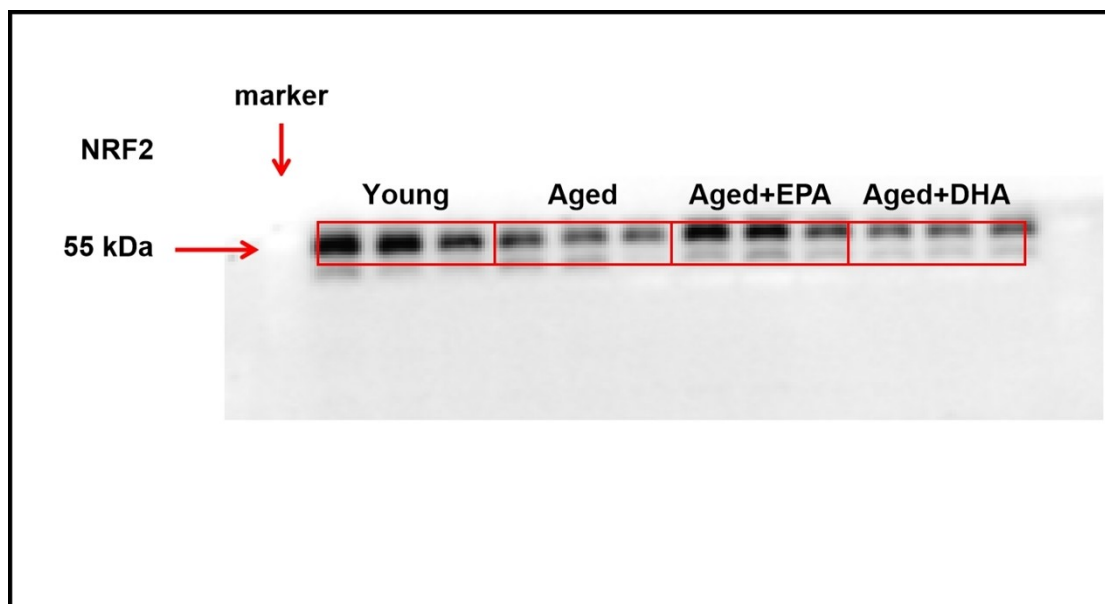
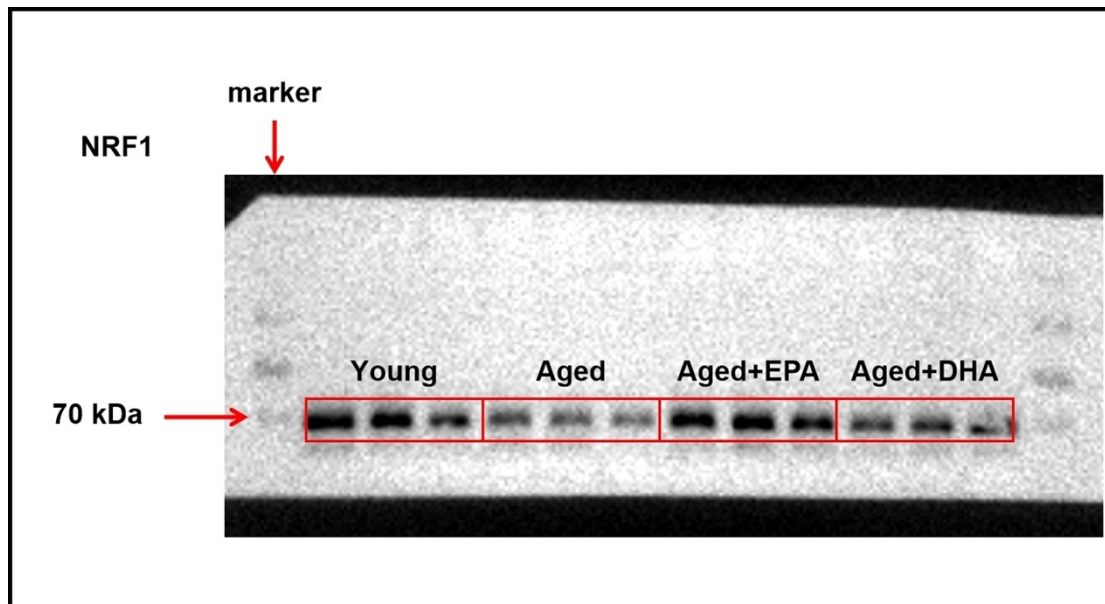


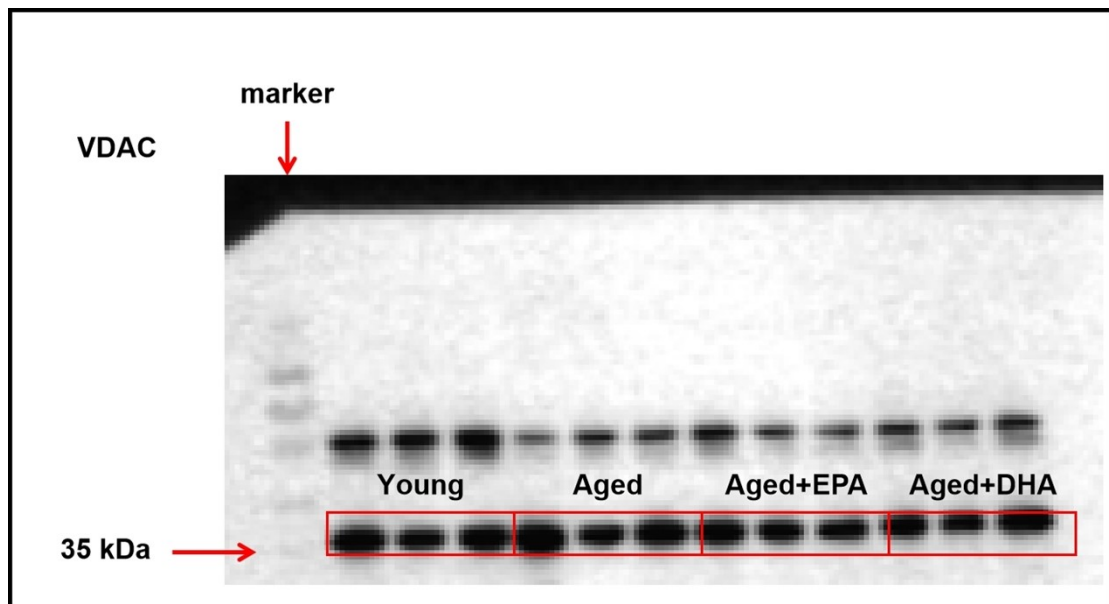
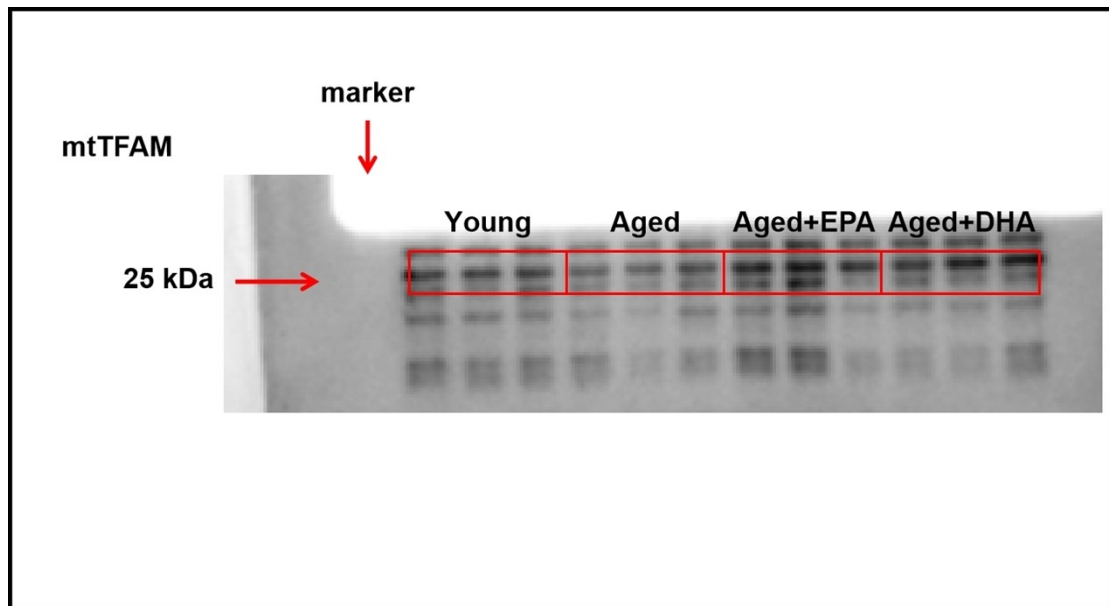




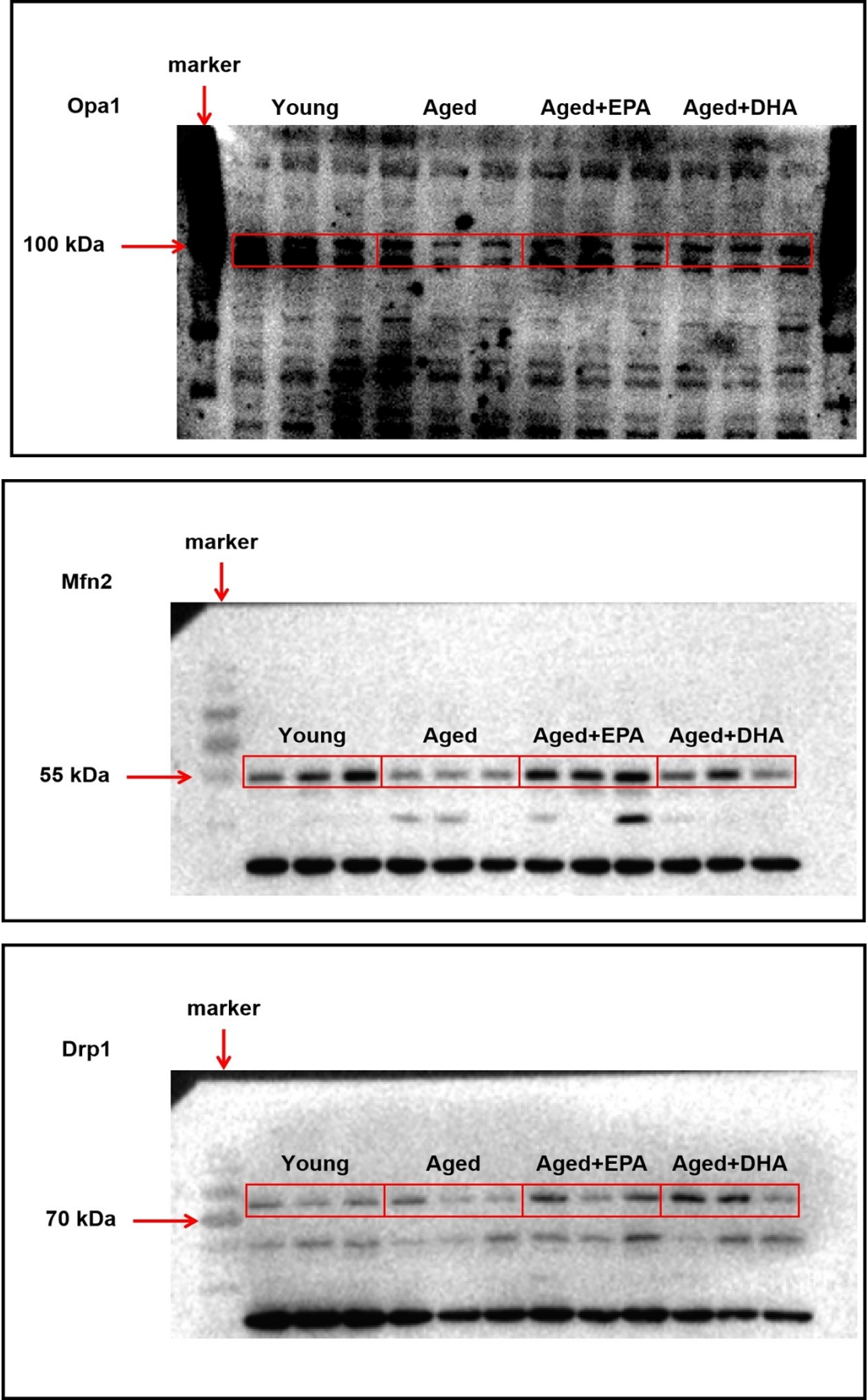
Uncropped blots for Figure 7C

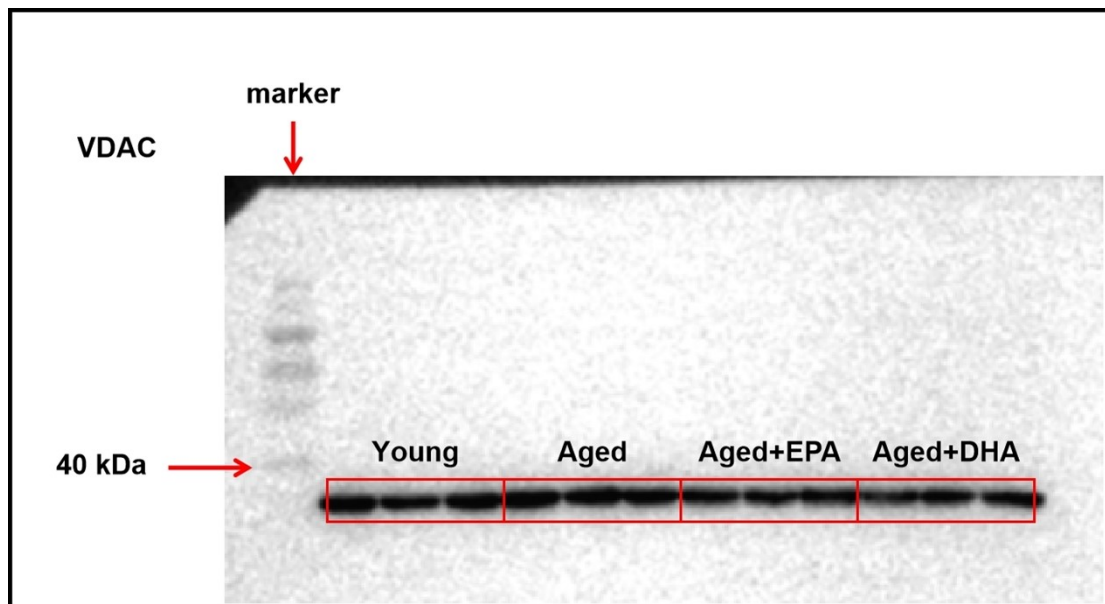
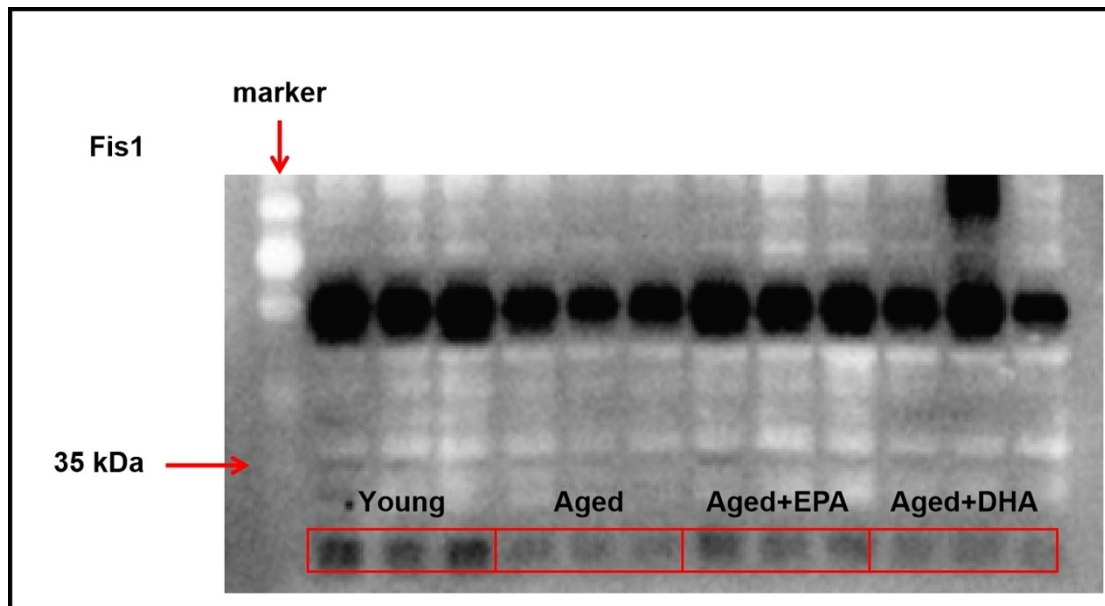






Uncropped blots for Figure 8A





Uncropped blots for Figure 8F

