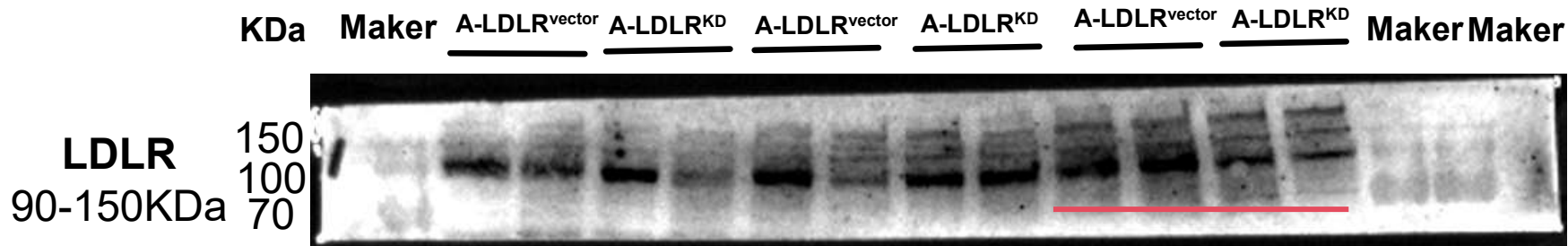
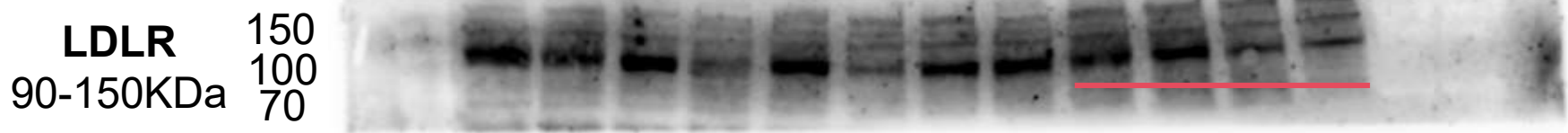


Descriptions

This document presents original Western blots. To illustrate both the marker and the original blot of the strip, we provide an overlay of the image captured under natural light alongside the strip obtained after exposure. We confirm the authenticity of all data presented and appreciate your understanding.



This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.



This is the raw image taken after exposure.

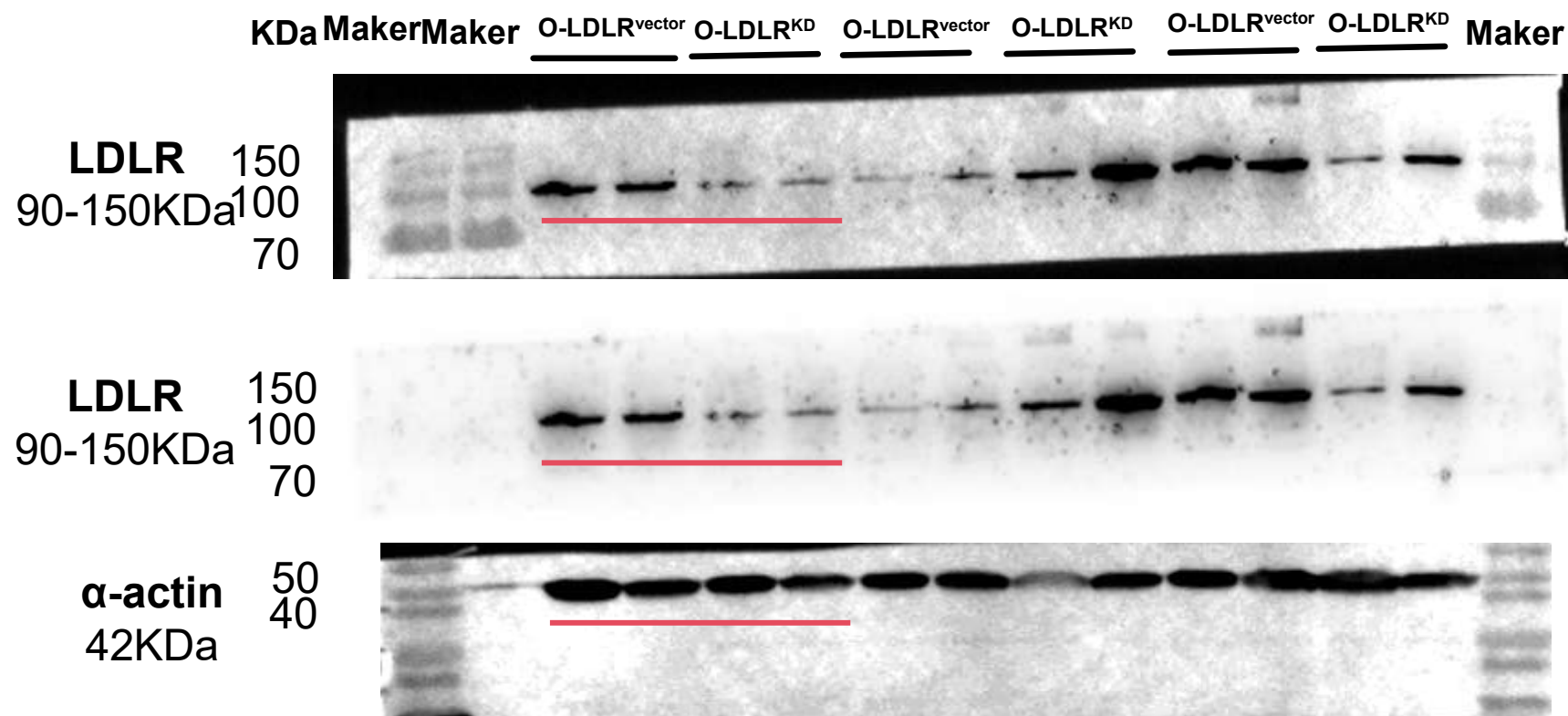


This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.



This is the raw image taken after exposure.

Fig.3 (A) LDLR protein blots in adult mice corresponded to the blots marked by red line.



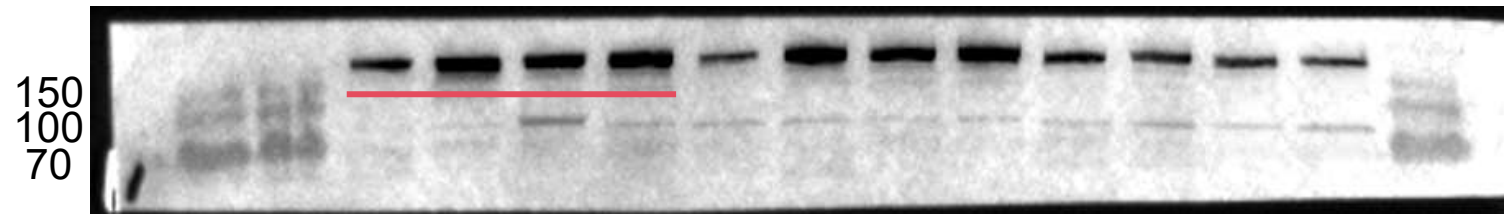
This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure.

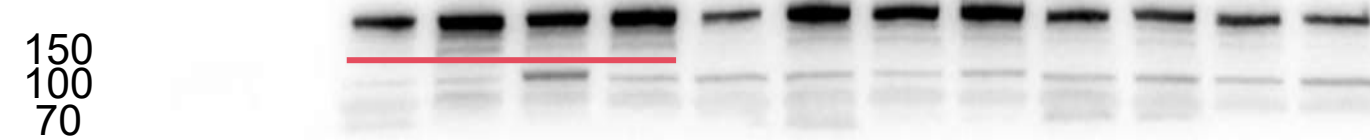
This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

Fig.3 (A) LDLR protein blots in old mice corresponded to the blots marked by red line.

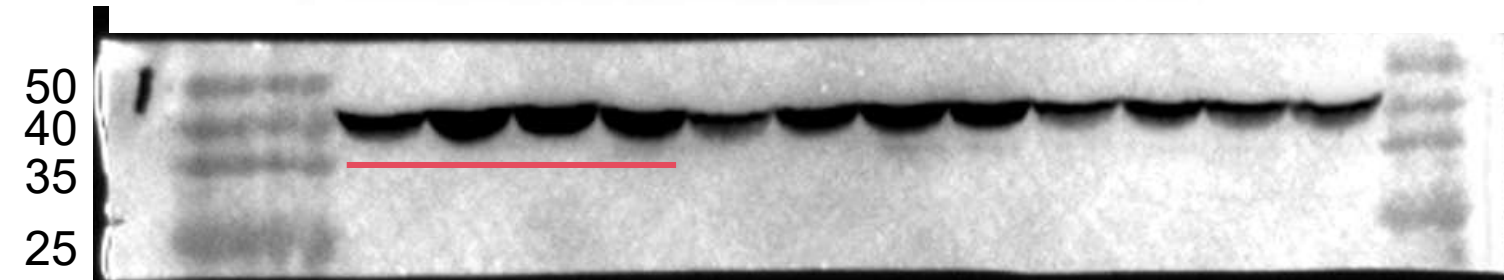
KDa **Maker** **Maker** A-LDLR^{vector} A-LDLR^{KD} A-LDLR^{vector} A-LDLR^{KD} A-LDLR^{vector} A-LDLR^{KD} **Maker**



This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.



This is the raw image taken after exposure.

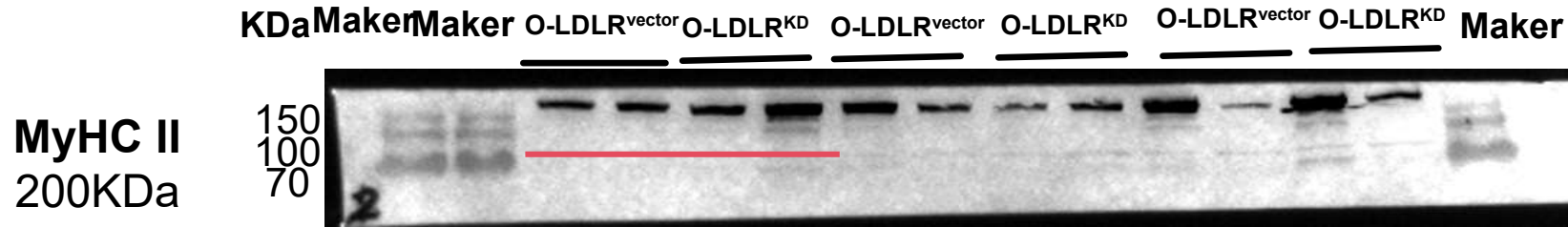


This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.



This is the raw image taken after exposure.

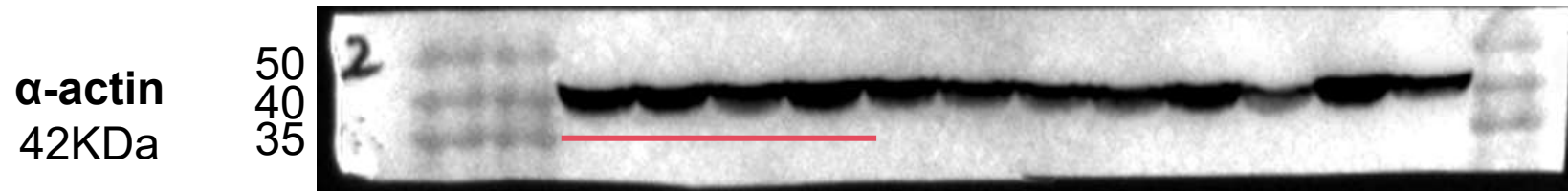
Fig.5 (D) MyHC II protein blots in adult mice corresponded to the blots marked by red line.



This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.



This is the raw image taken after exposure.

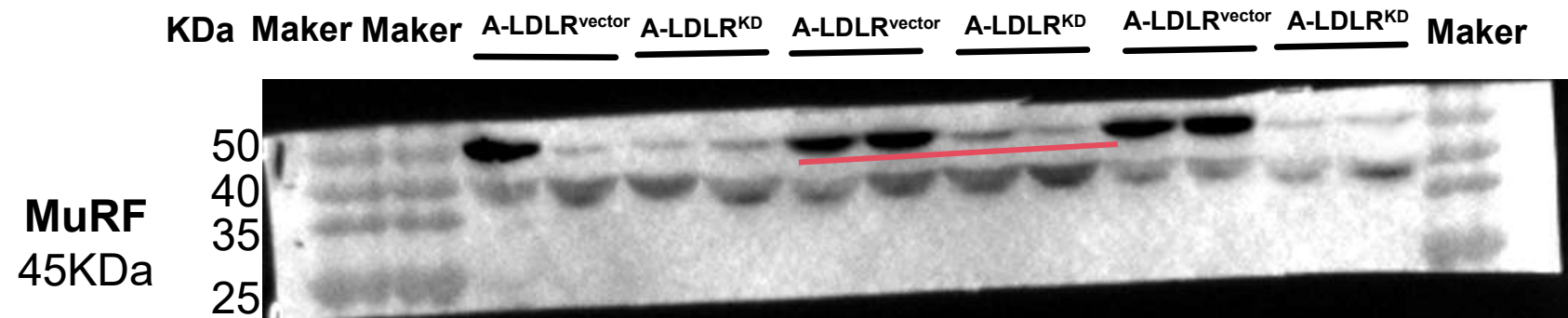


This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.



This is the raw image taken after exposure.

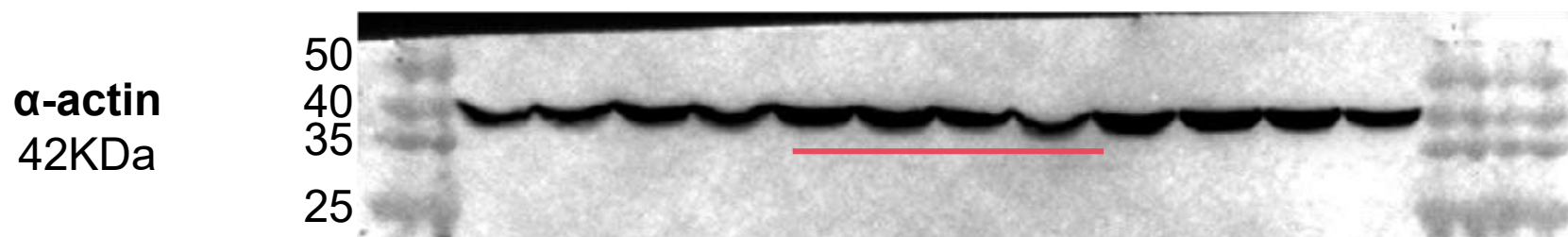
Fig.5 (D) MyHCII protein blots in old mice corresponded to the blots marked by red line.



This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.



This is the raw image taken after exposure.

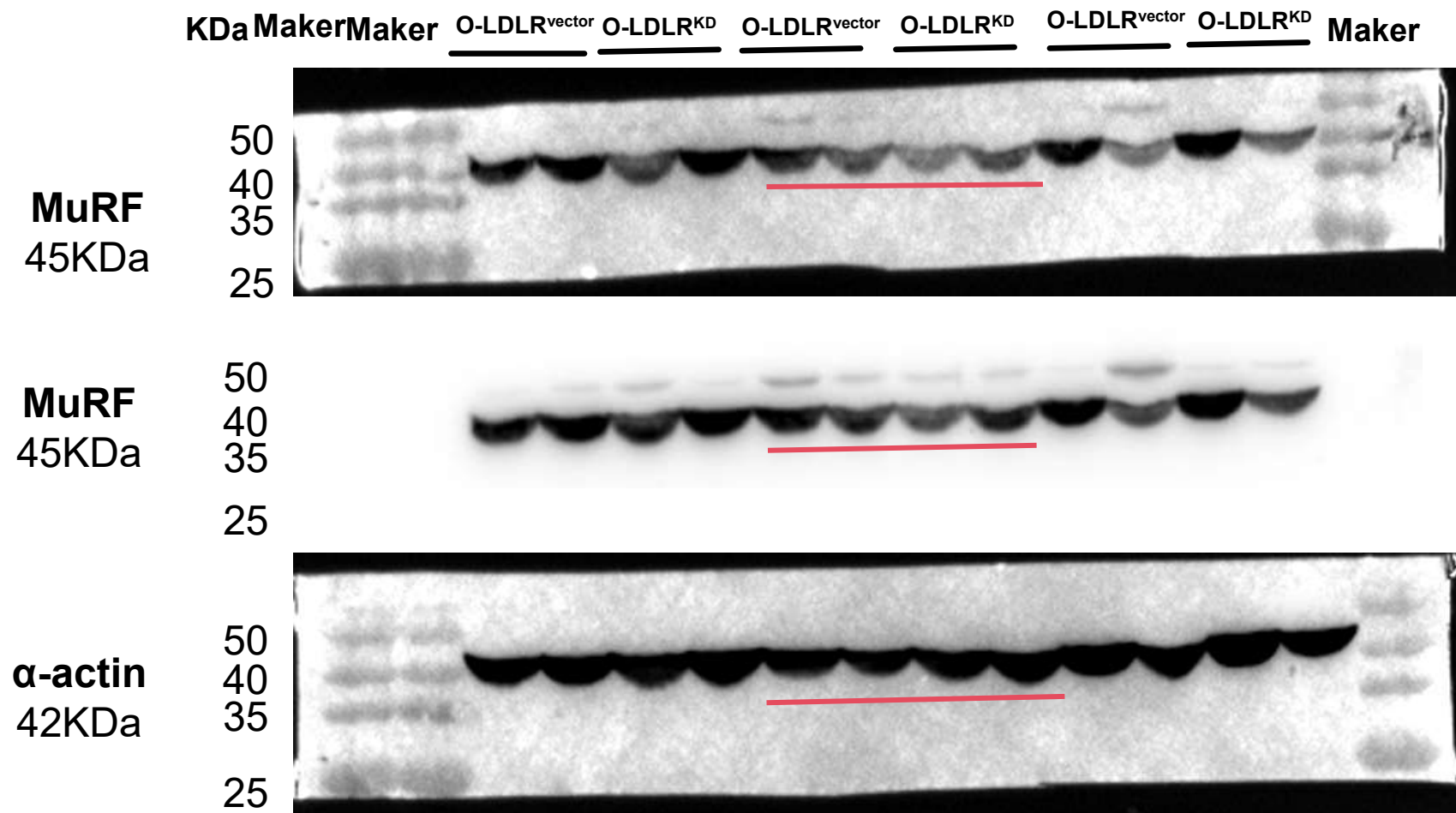


This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.



This is the raw image taken after exposure.

Fig.5 (D) MuRF protein blots in adult mice corresponded to the blots marked by red line.

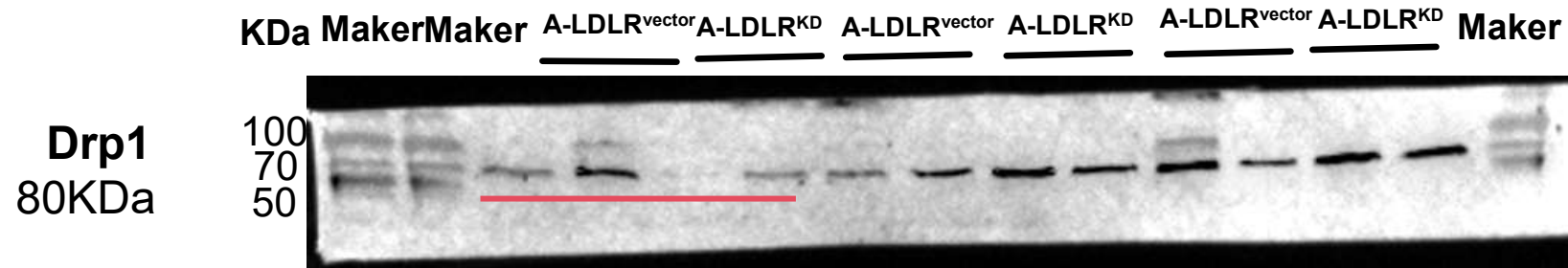


This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

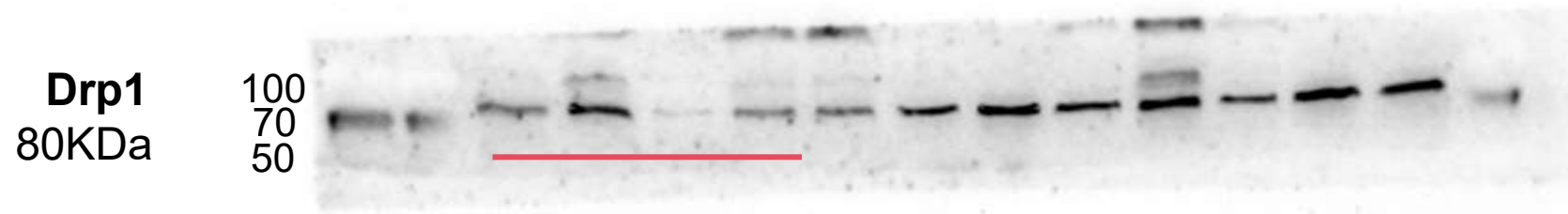
This is the raw image taken after exposure.

This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

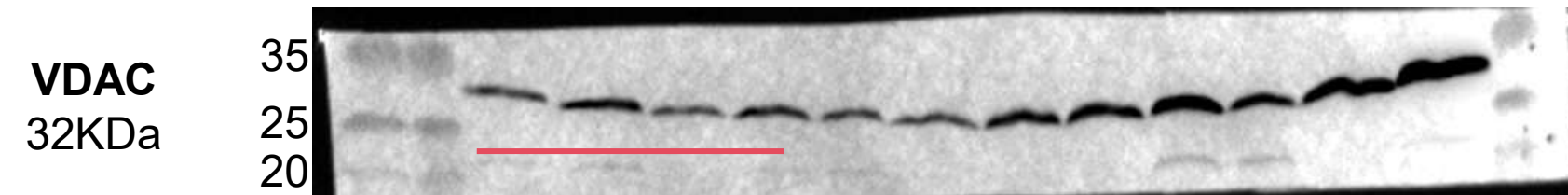
Fig.5 (D) MuRF protein blots in old mice corresponded to the blots marked by red line



This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.



This is the raw image taken after exposure

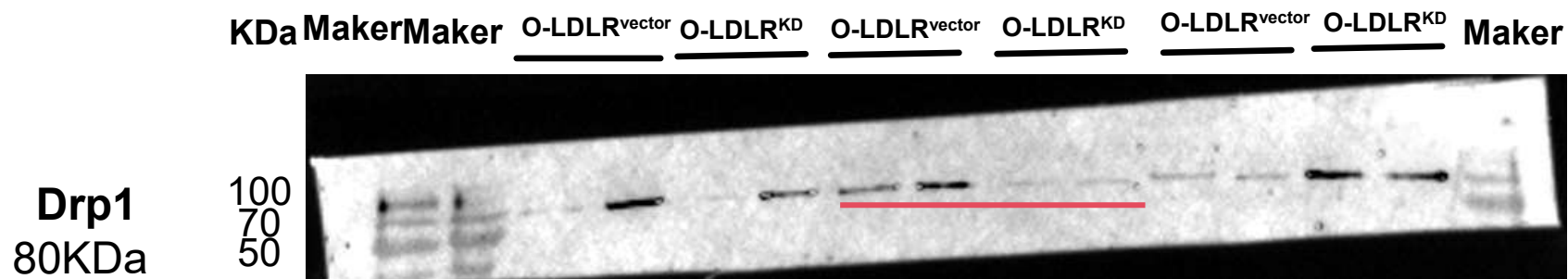


This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

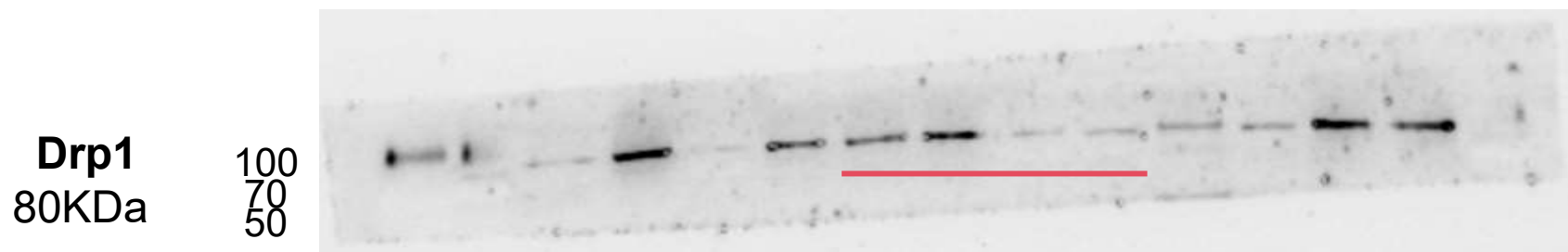


This is the raw image taken after exposure

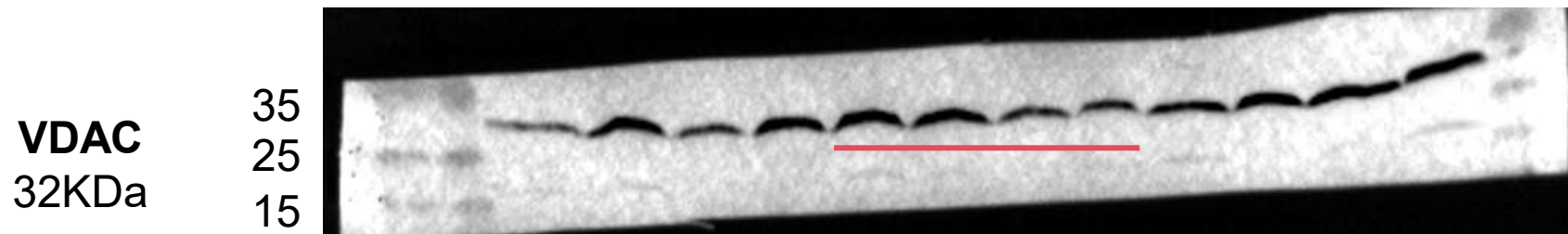
Fig.6 (C) Drp1 protein blots in adult mice corresponded to the blots marked by red line



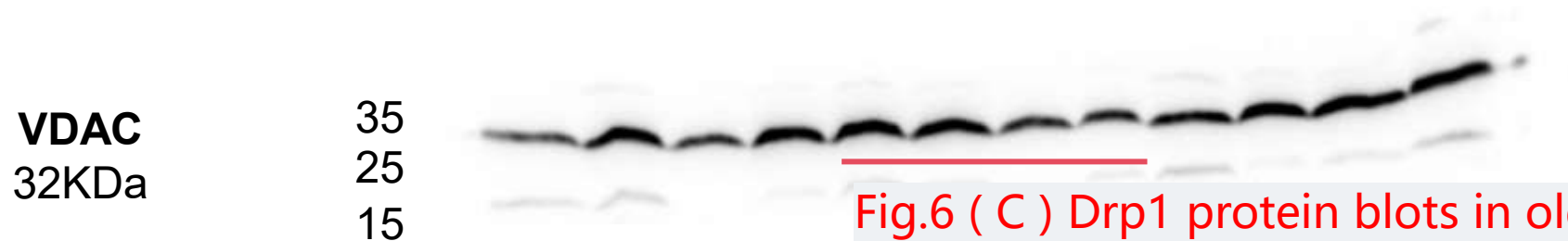
This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.



This is the raw image taken after exposure

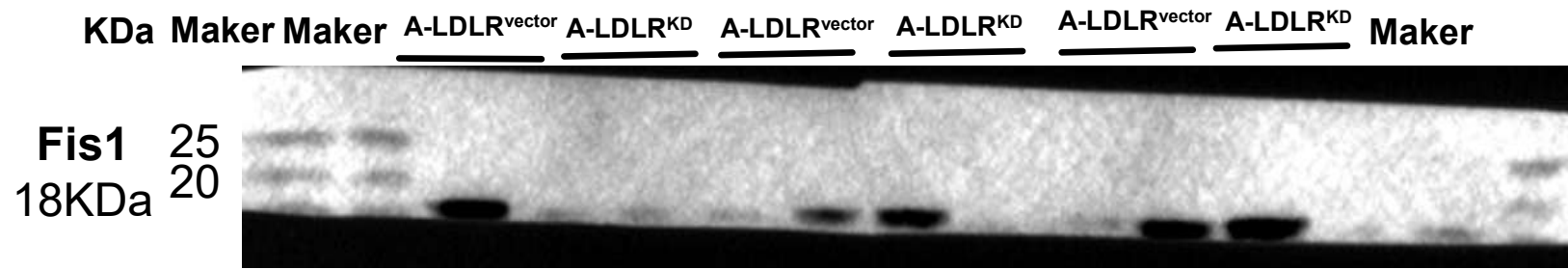


This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

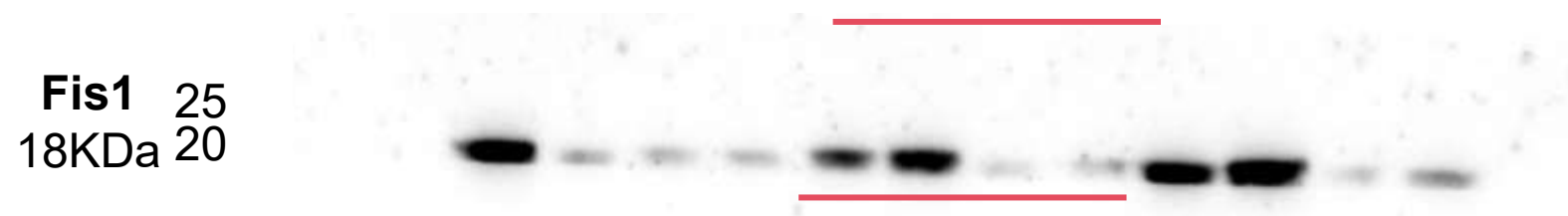


This is the raw image taken after exposure

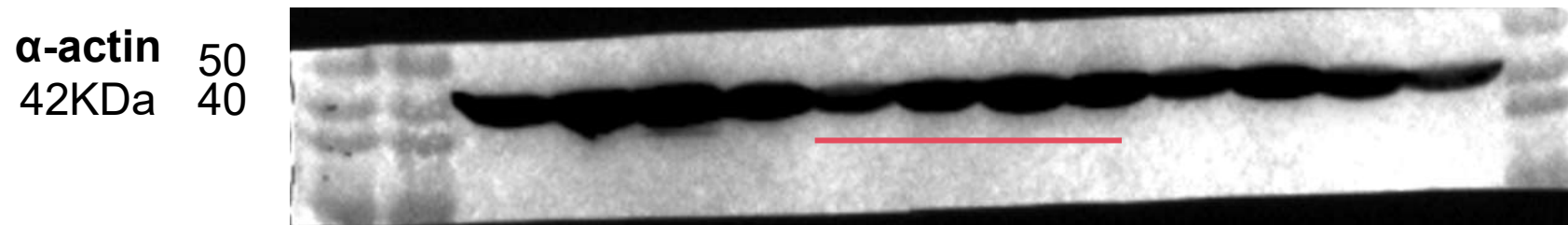
Fig.6 (C) Drp1 protein blots in old mice corresponded to the blots marked by red line



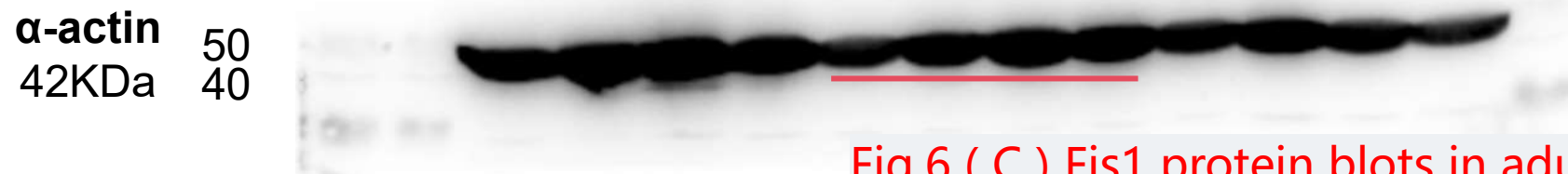
This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.



This is the raw image taken after exposure

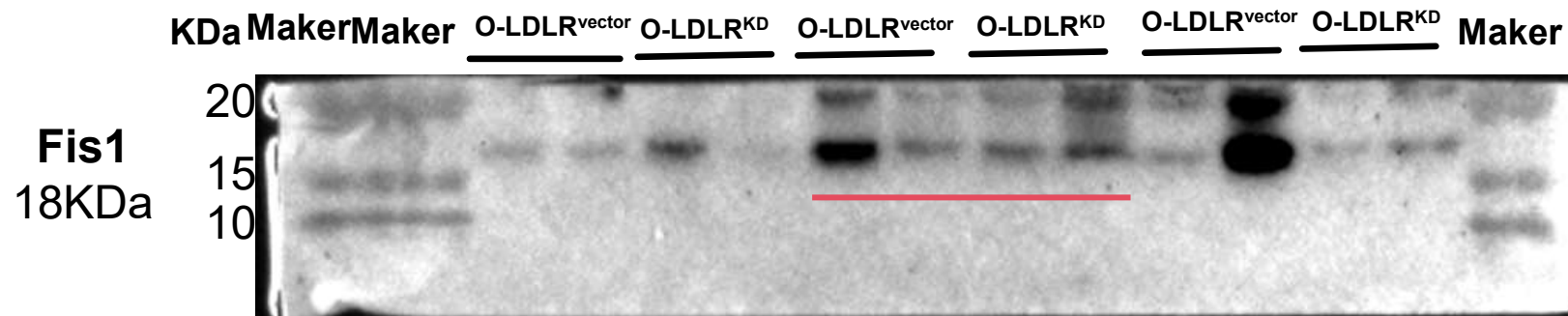


This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

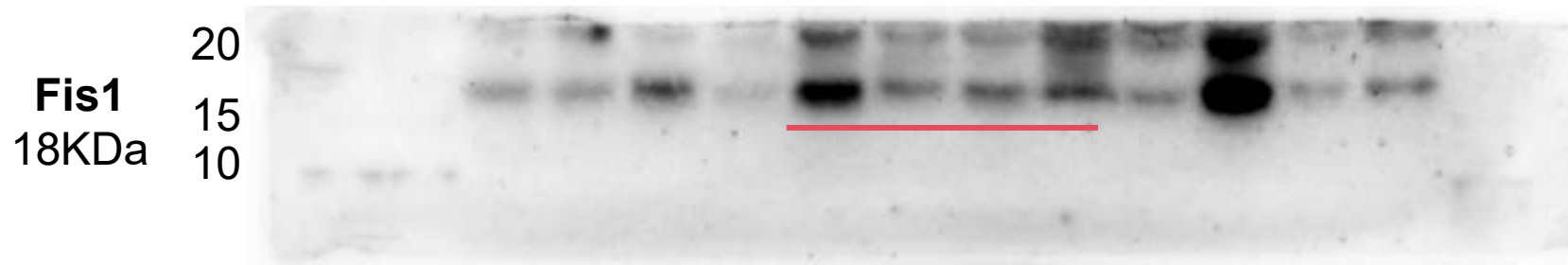


This is the raw image taken after exposure

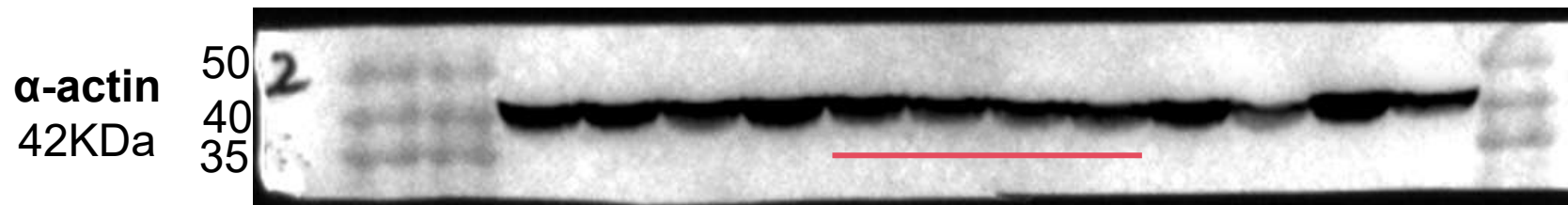
Fig.6 (C) Fis1 protein blots in adult mice corresponded to the blots marked by red line



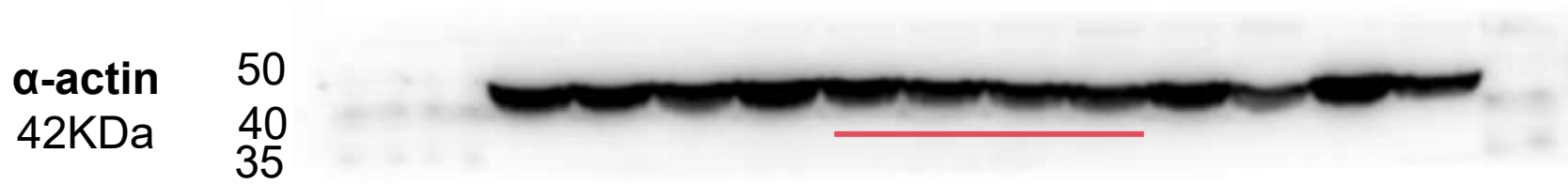
This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.



This is the raw image taken after exposure

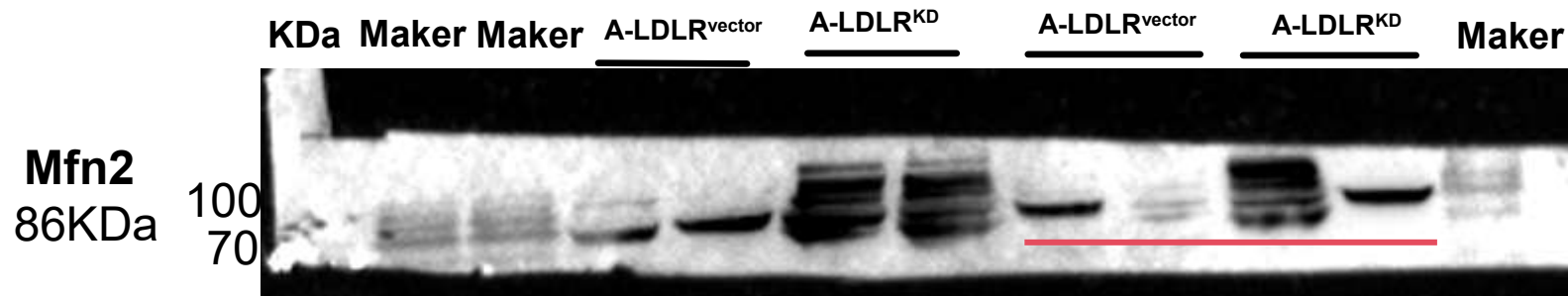


This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

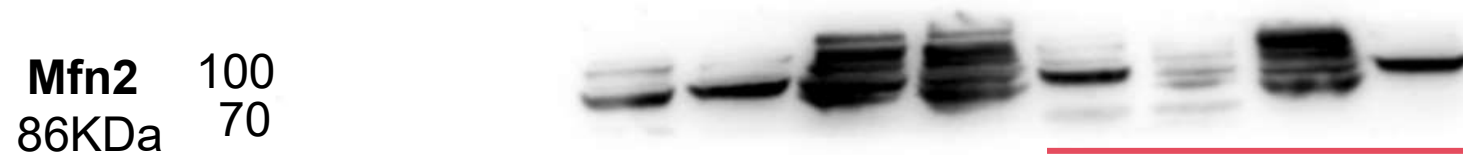


This is the raw image taken after exposure

Fig.6 (C) Fis1 protein blots in old mice corresponded to the blots marked by red line



This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.



This is the raw image taken after exposure

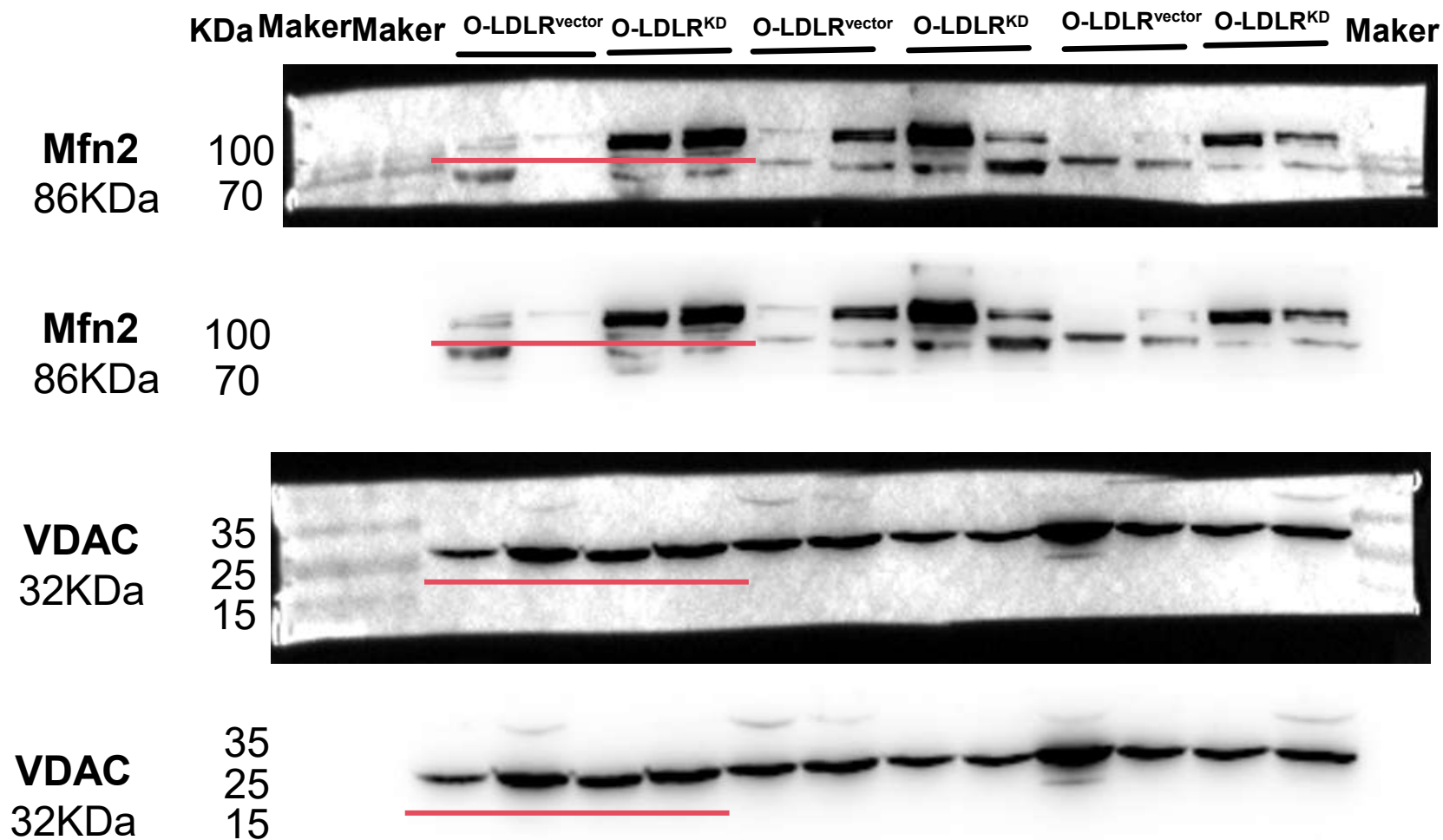


This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots



This is the raw image taken after exposure

Fig.6 (D) Mfn2 protein blots in adult mice corresponded to the blots marked by red line



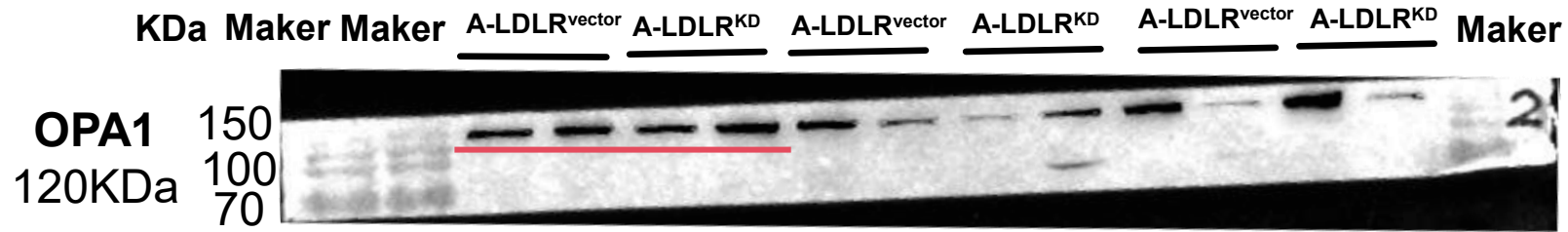
This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

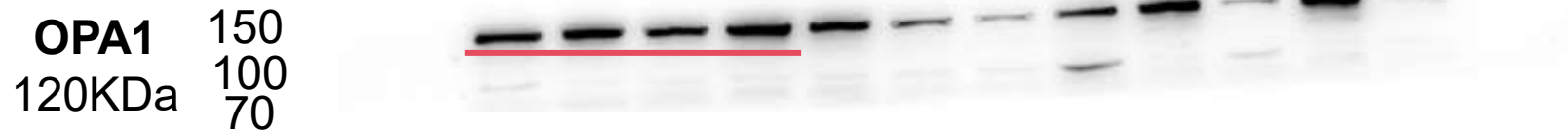
This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

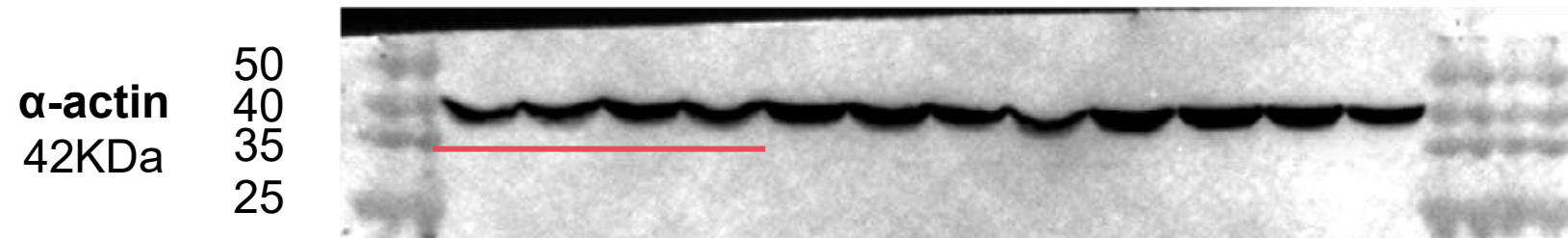
Fig.6 (D) Mfn2 protein blots in oldmice corresponded to the blots marked by red line



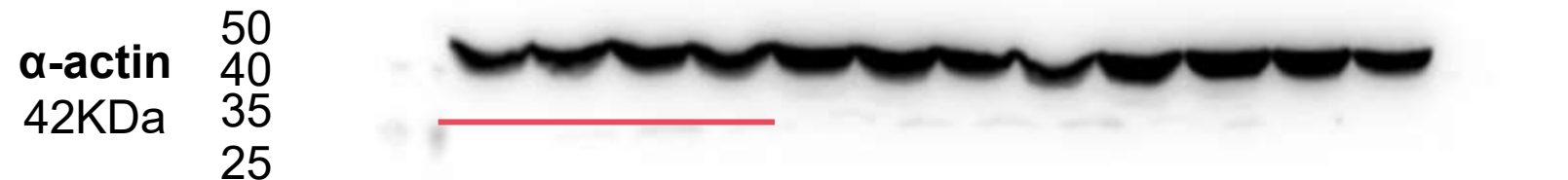
This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.



This is the raw image taken after exposure

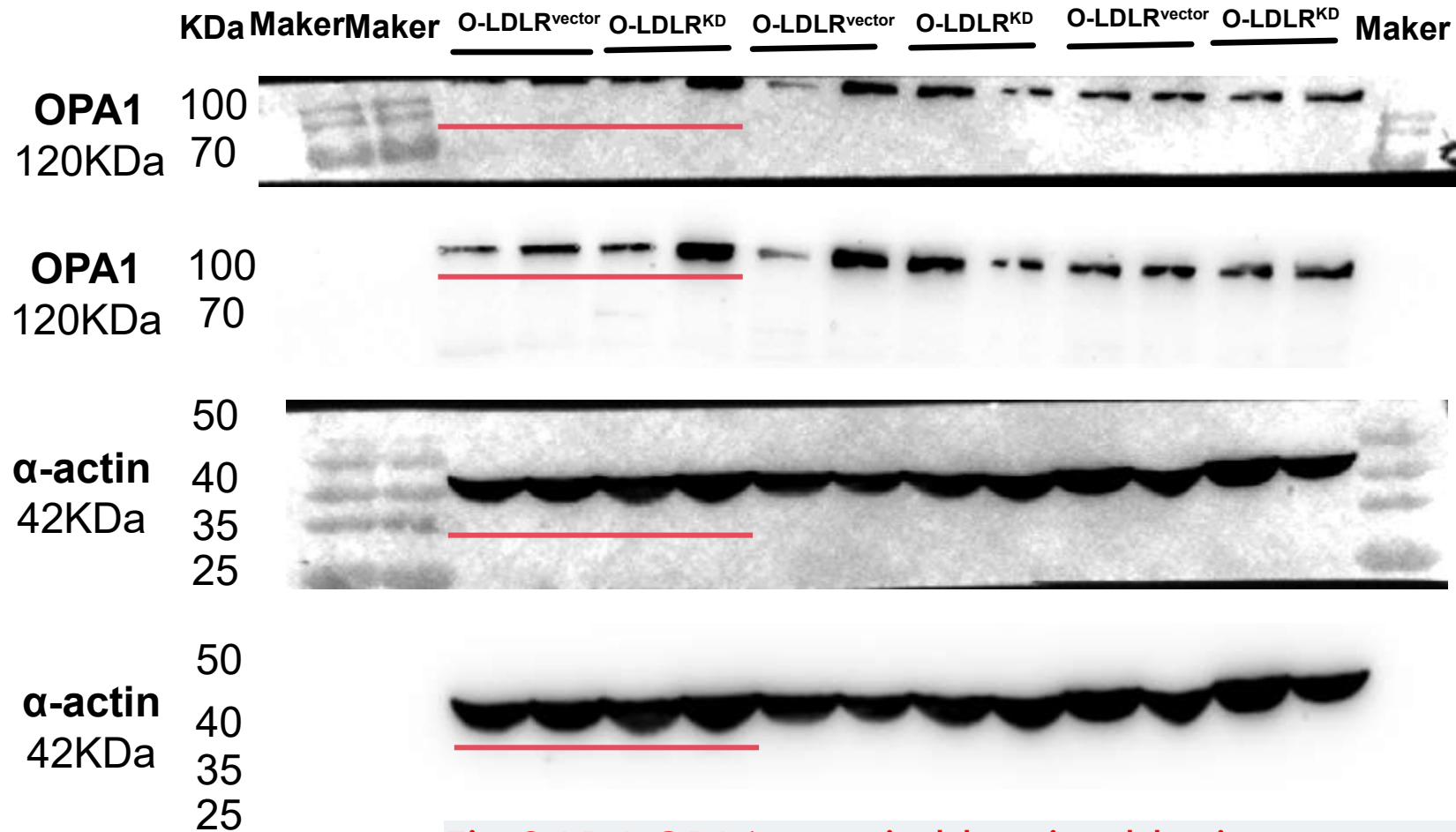


This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.



This is the raw image taken after exposure

Fig.6 (D) OPA1 protein blots in adult mice corresponded to the blots marked by red line



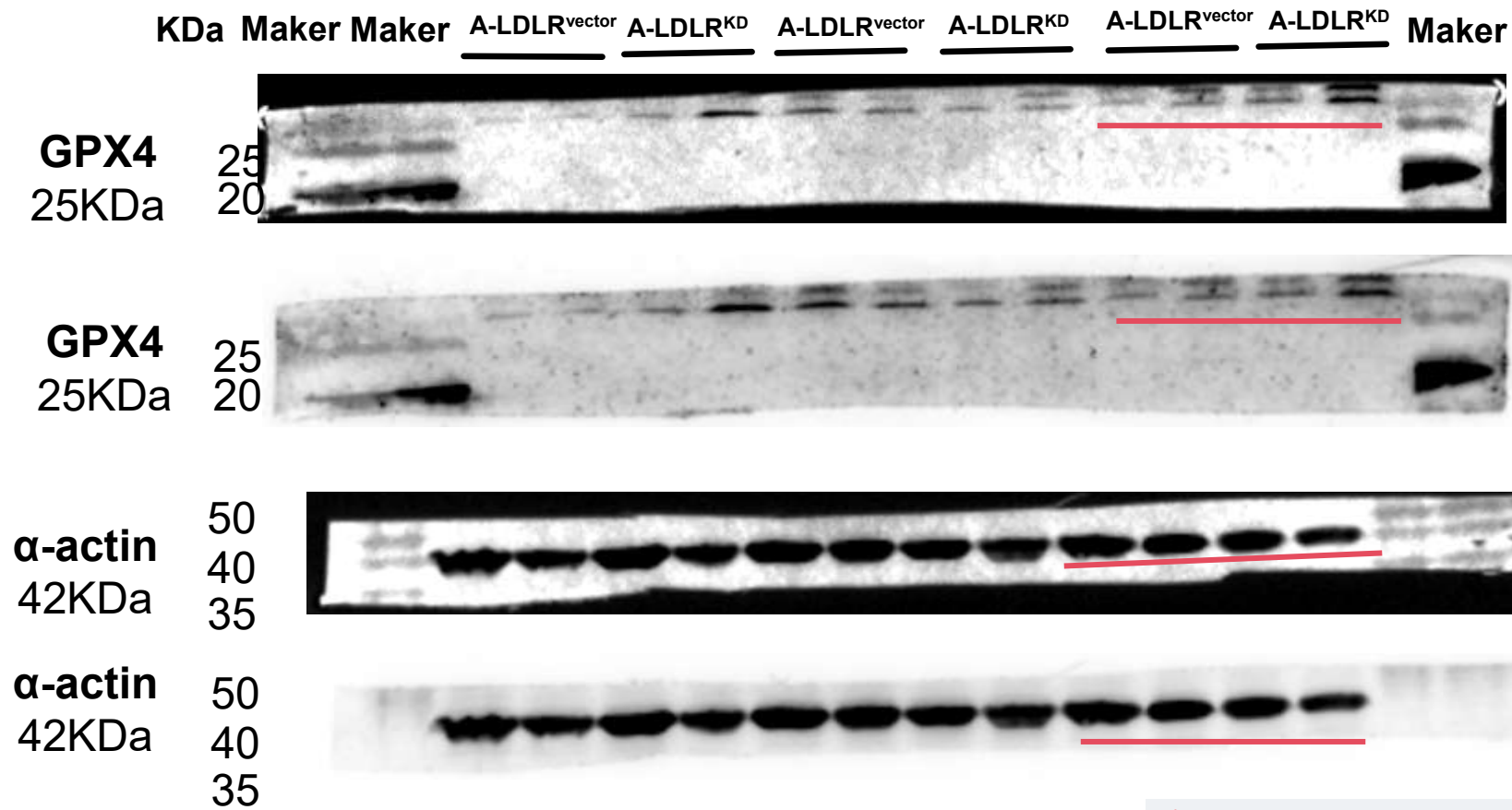
This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

Fig.6 (D) OPA1 protein blots in old mice corresponded to the blots marked by red line



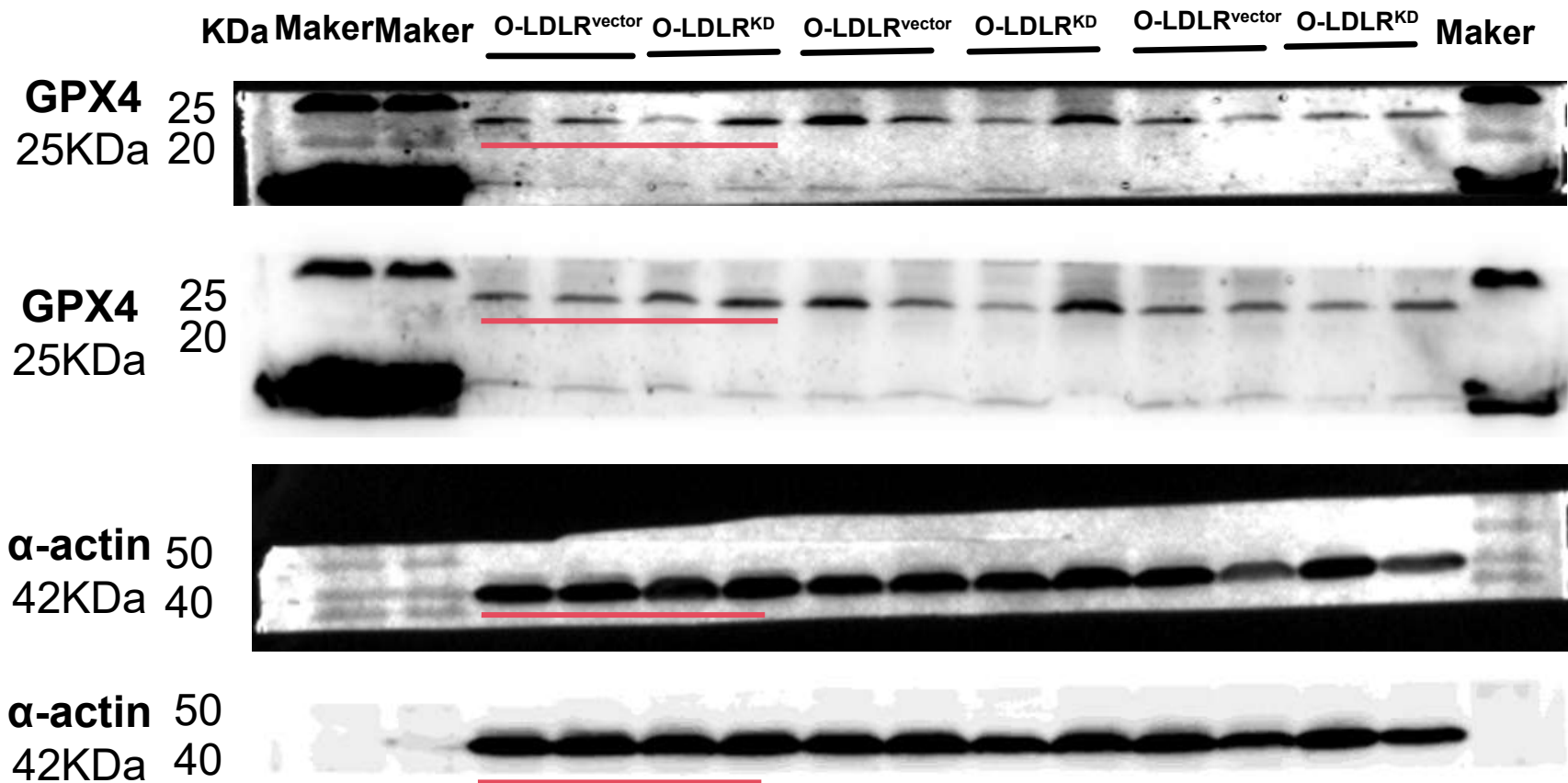
This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

Fig.7 (A) GPX4 protein blots in adult mice corresponded to the blots marked by red line



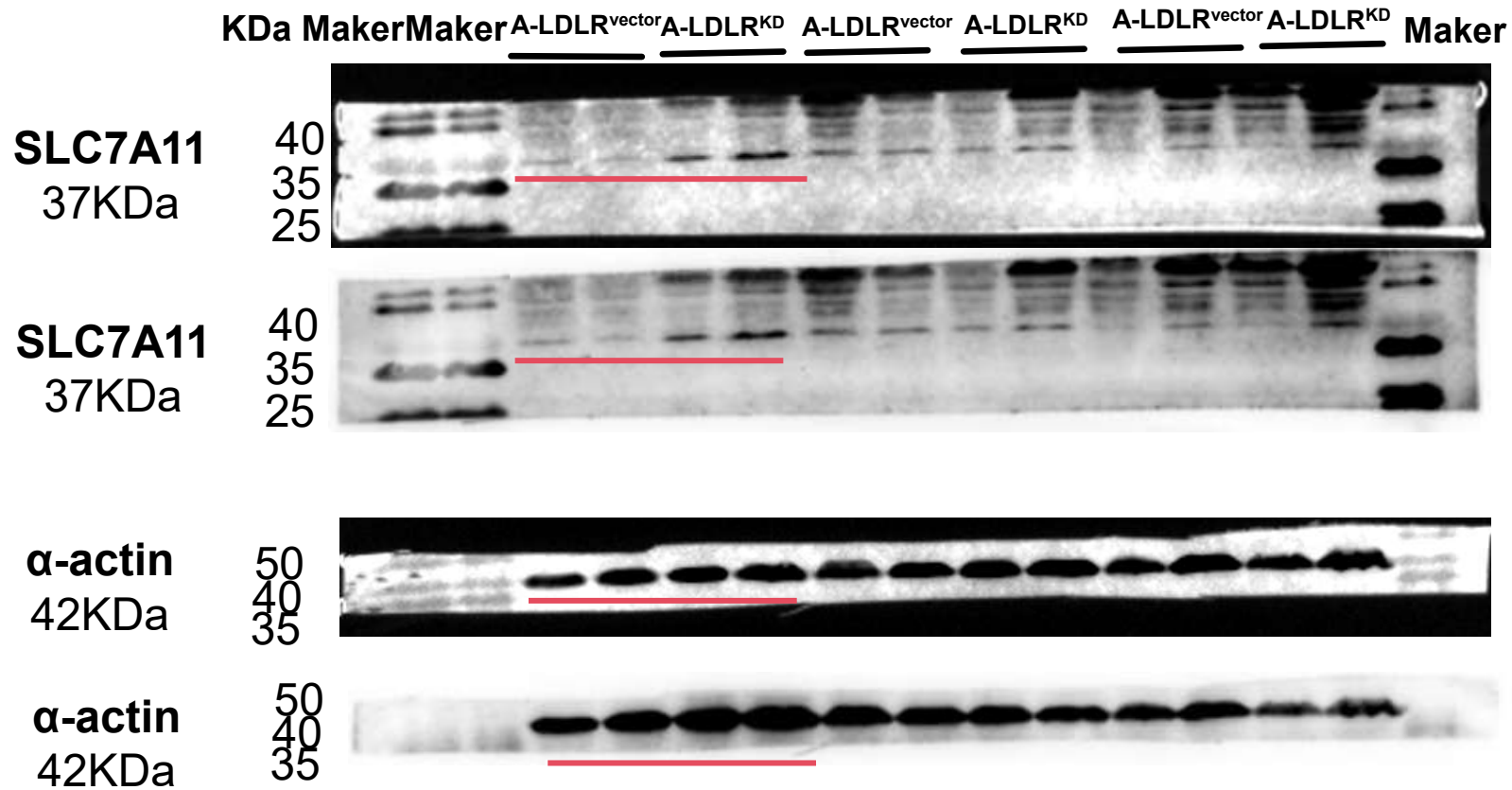
This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

Fig.7 (A) GPX4 protein blots in old mice corresponded to the blots marked by red line



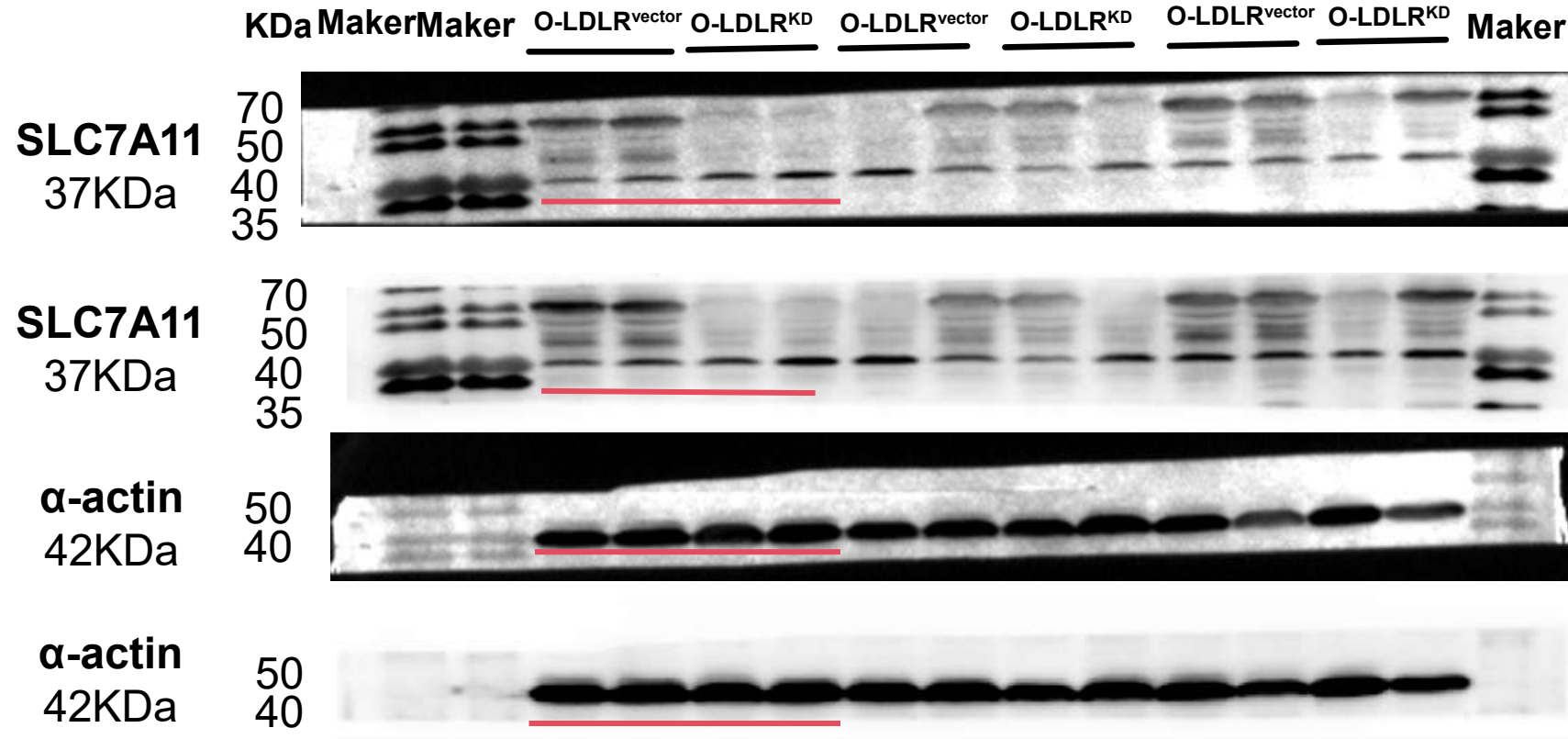
This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

Fig.7 (A) SLC7A11 protein blots in adult mice corresponded to the blots marked by red line



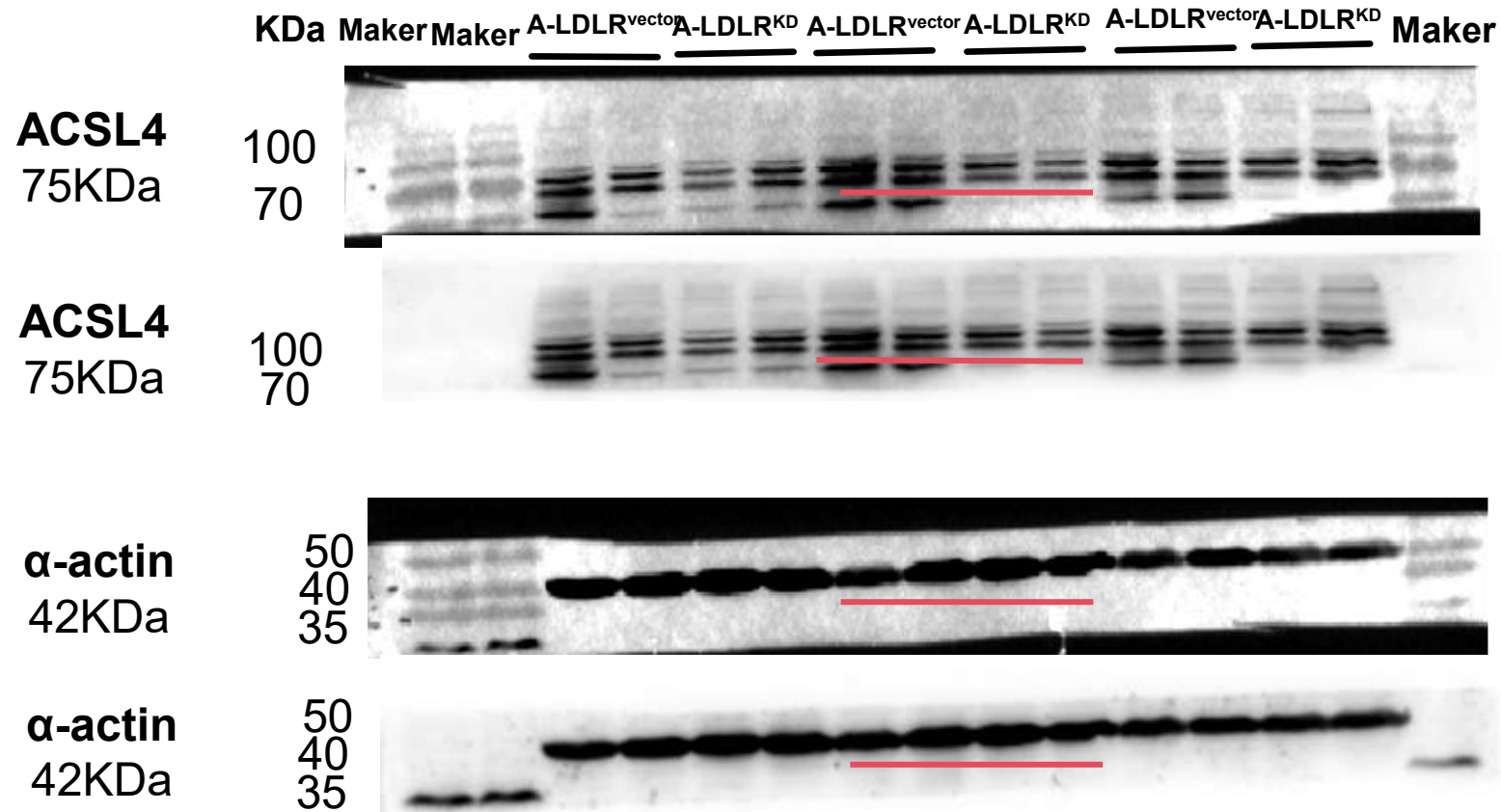
This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

Fig.7 (A) SLC7A11 protein blots in old mice corresponded to the blots marked by red line



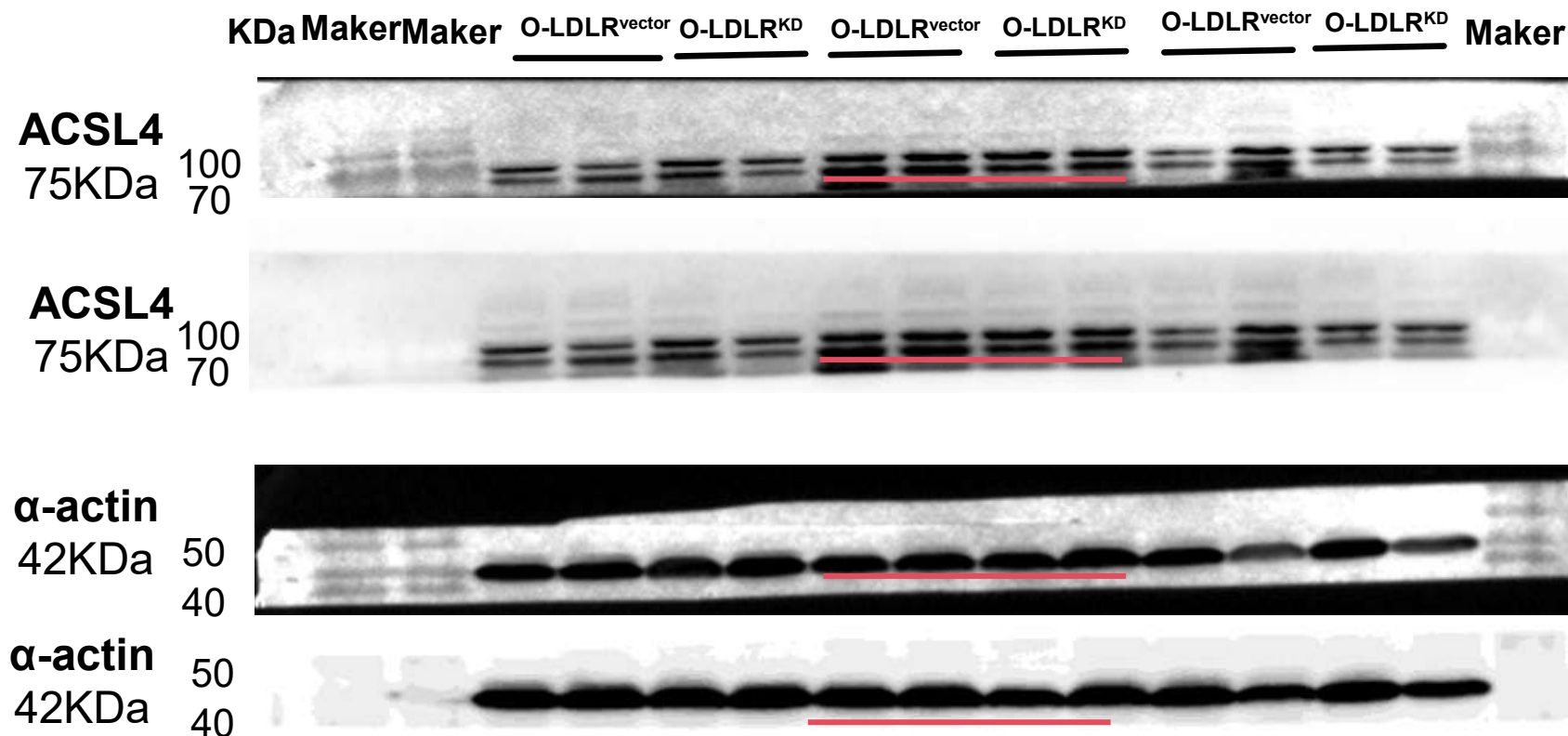
This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

Fig.7 (C) ACSL4 protein blots in adult mice corresponded to the blots marked by red line



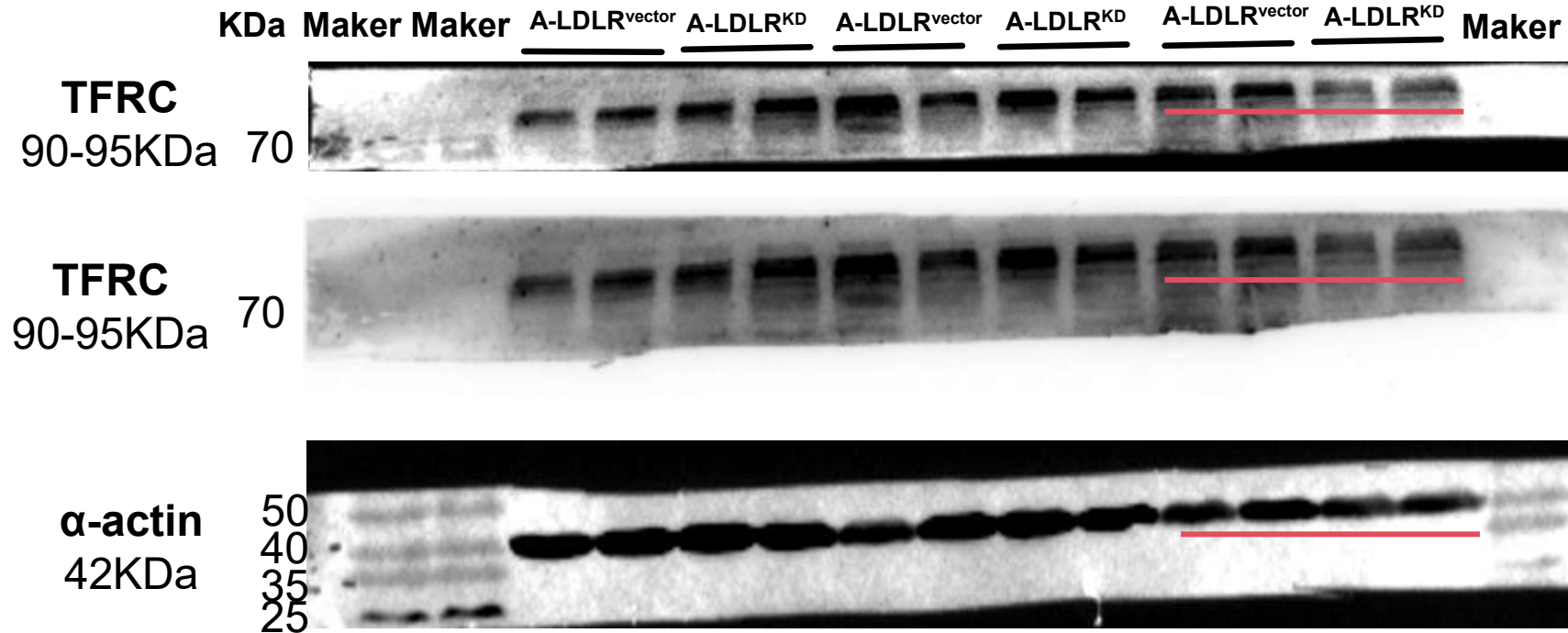
This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

Fig.7 (C) ACSL4 protein blots in old mice corresponded to the blots marked by red line

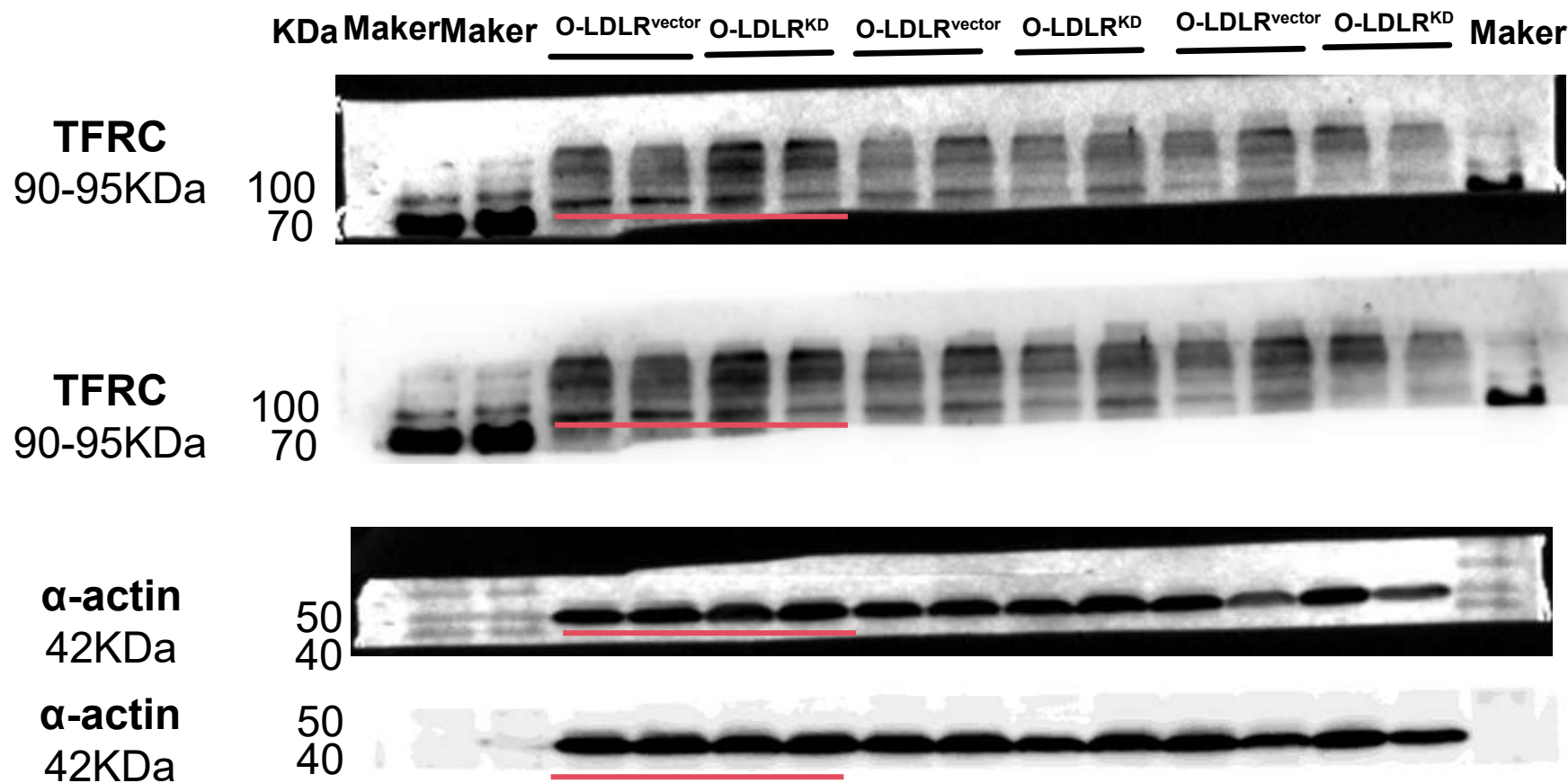


This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

Fig.7 (C) TFRC protein blots in adult mice corresponded to the blots marked by red line



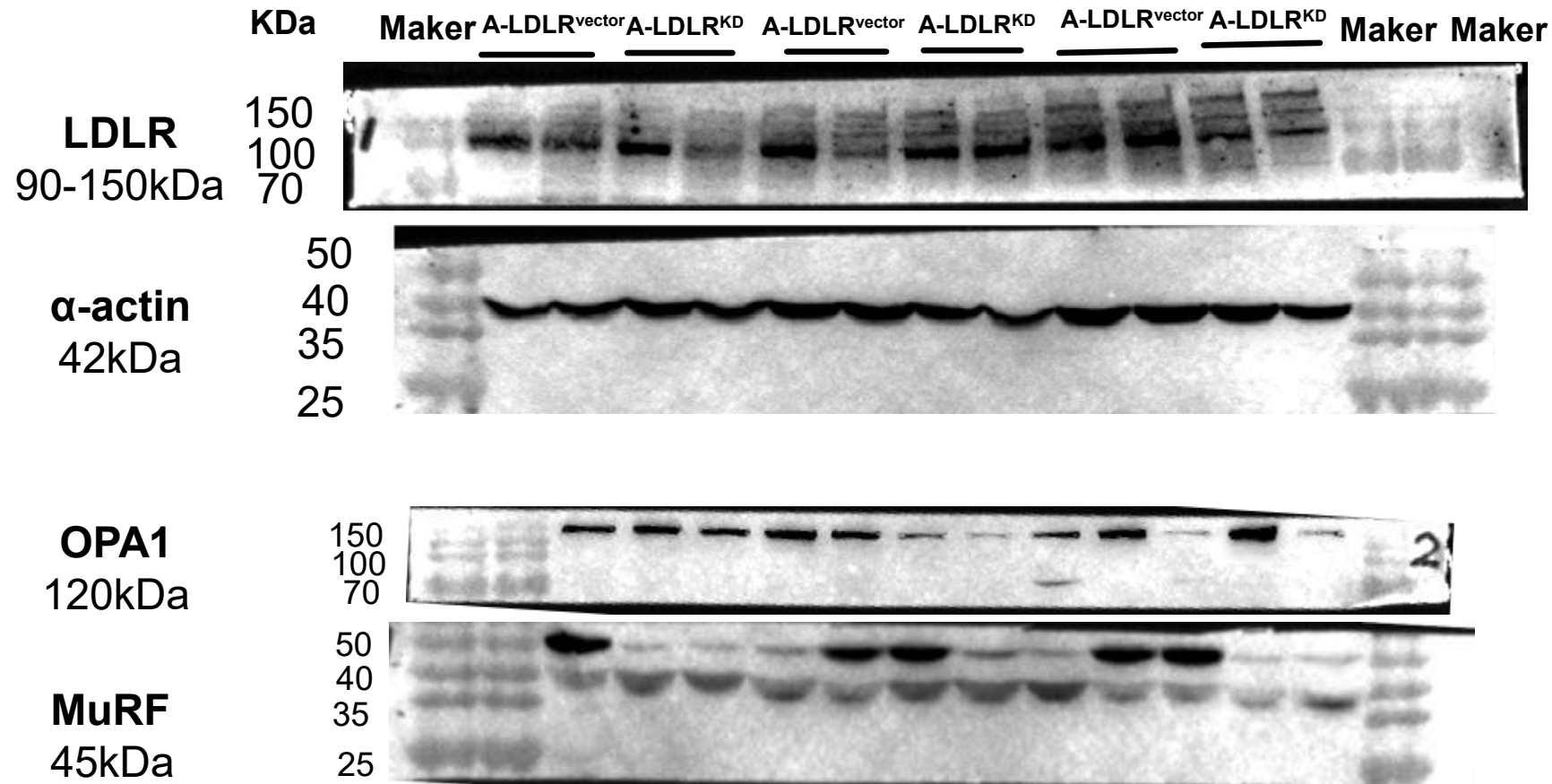
This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

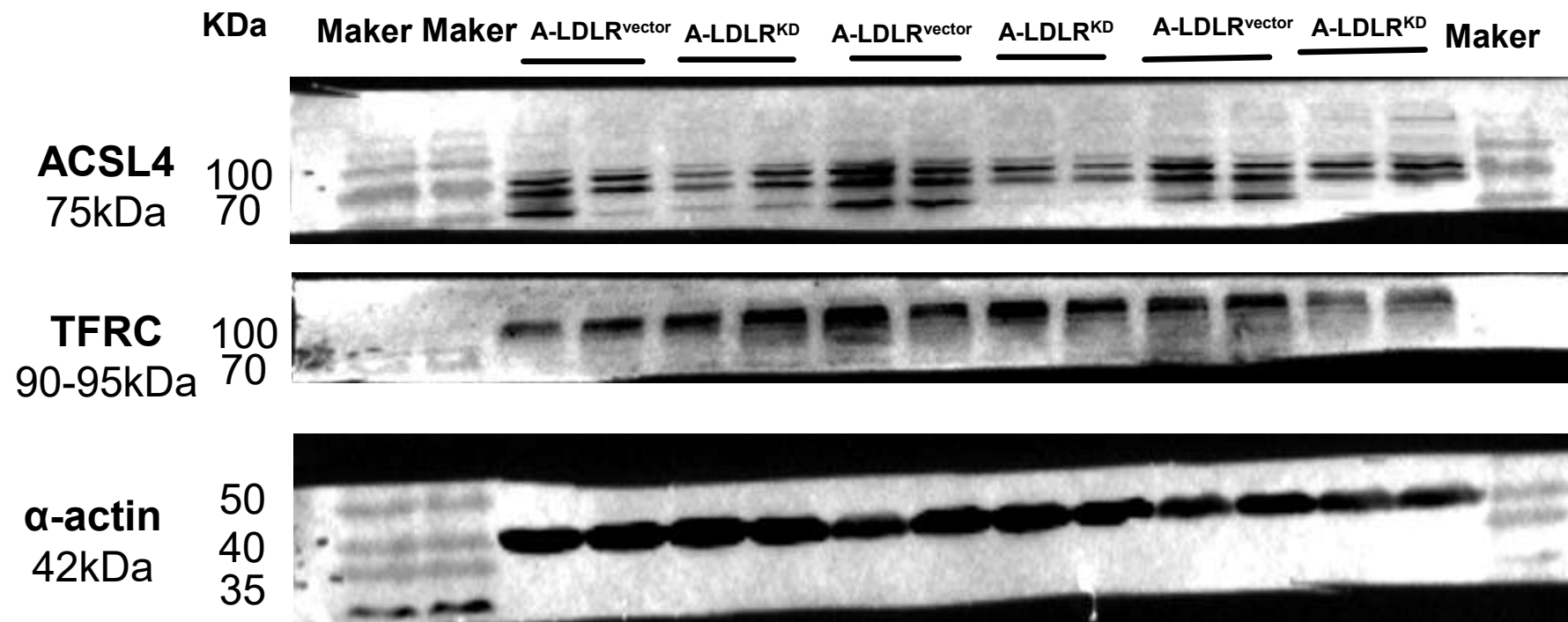
This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

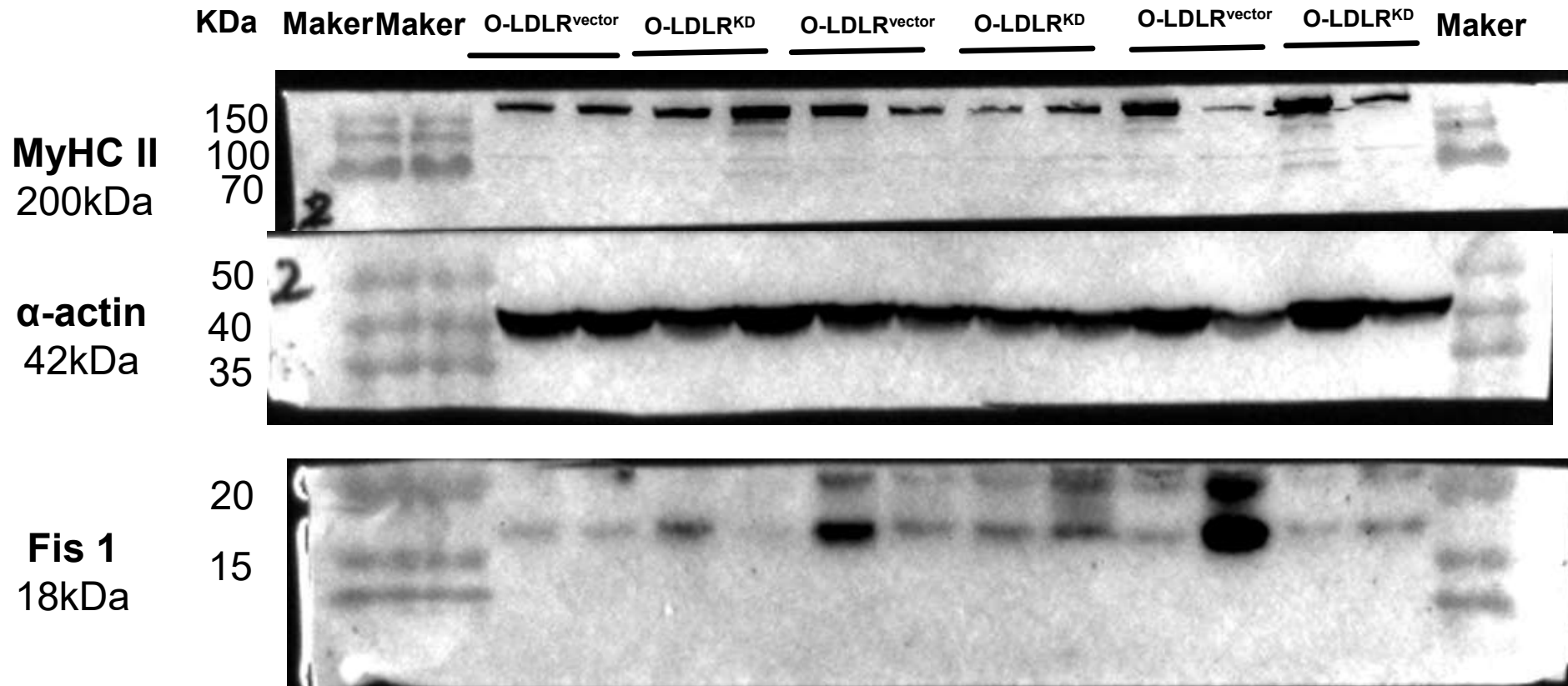
Fig.7 (C) TFRC protein blots in old mice corresponded to the blots marked by red line



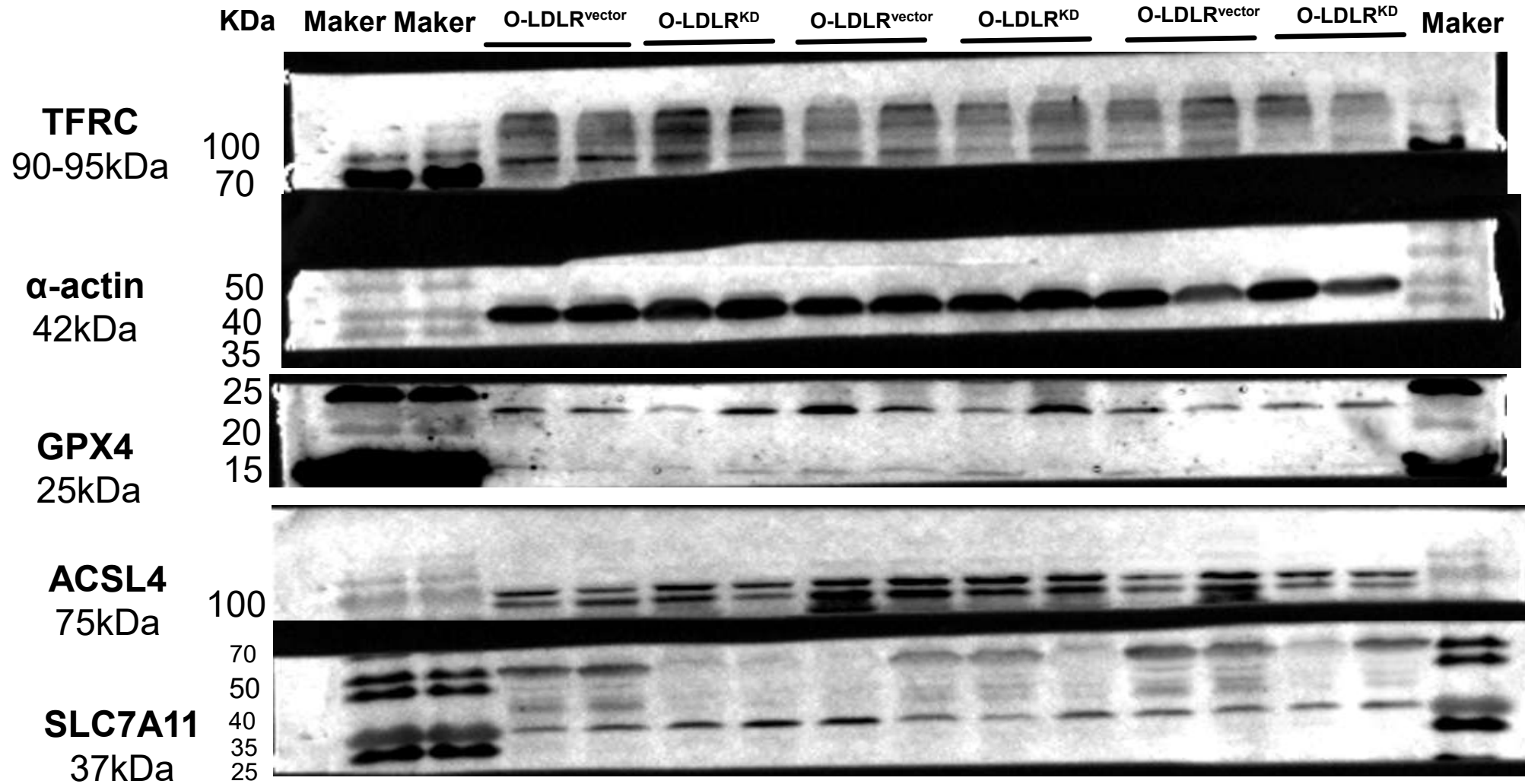
LDLR protein, and **α-actin** protein blots belong to the same gel. However, the **OPA1** protein and **MuRF** protein blots were from another gel because the molecular weight of the **MuRF** protein is similar to that of **α-actin**. The **LDLR**, **α-actin**, **OPA1** and **MuRF** protein blots were performed in the same experiment with all experimental conditions.



ACSL4 protein, **TFRC** protein, and **α-actin** protein blots all belong to the same gel.

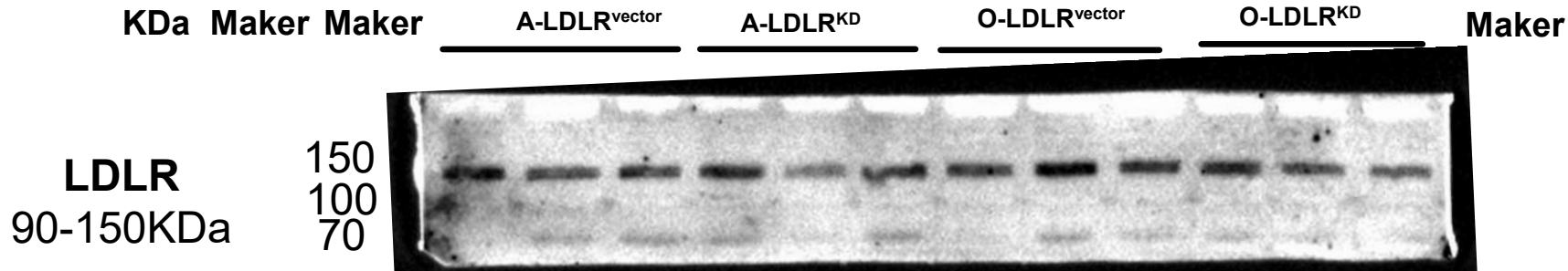


MyHC II protein, **α-actin** protein and **Fis 1** protein blots all belong to the same gel.

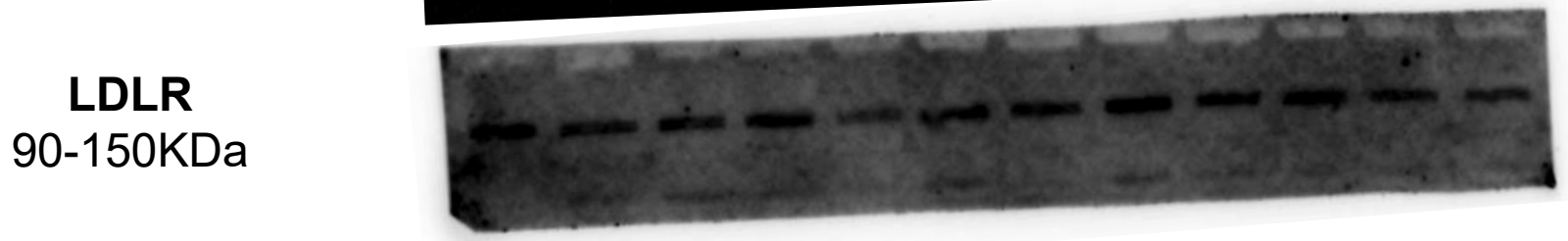


TFRC protein, **α-actin** and **GPX4** protein blots belong to the same gel. However, the **ACSL4** protein and **SLC7A11** protein blots were from another gel because the molecular weight of the **SLC7A11** protein is similar to that of **α-actin**. The **TFRC**, **α-actin**, **GPX4**, **ACSL4** and **SLC7A11** protein blots were performed in the same experiment with all experimental conditions.

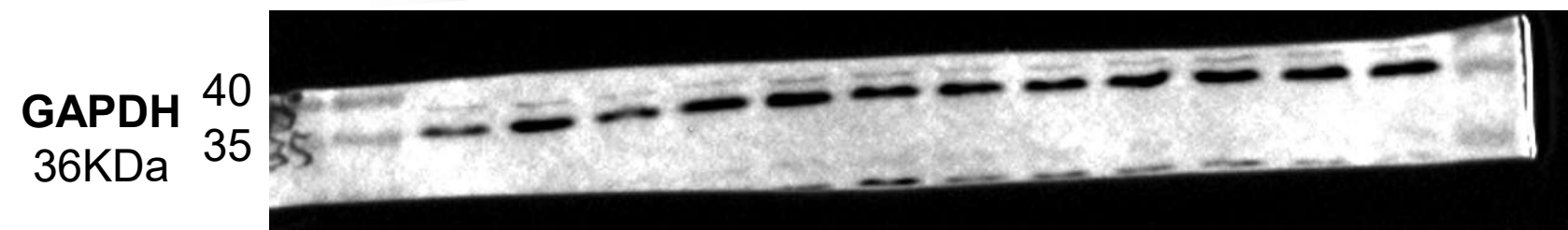
Below are the original images of the Western blot from the supplemental material



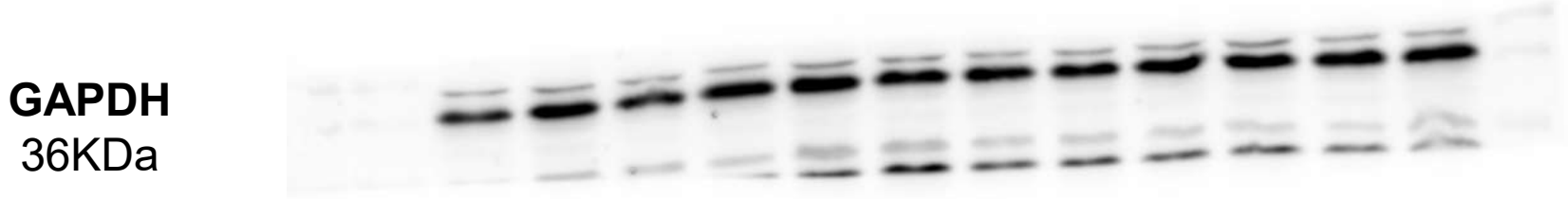
This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.



This is the raw image taken after exposure.



This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.



This is the raw image taken after exposure.

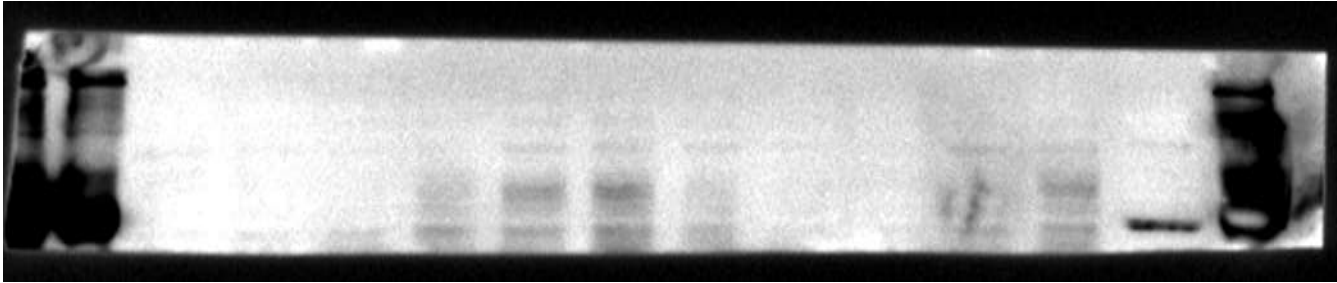
These blots correspond to Figure S2 (A)

LDLR expression in heart tissue

KDa **Maker** **Maker** A-LDLR^{vector} A-LDLR^{KD} O-LDLR^{vector} O-LDLR^{KD} **Maker**

LDLR
90-150KDa

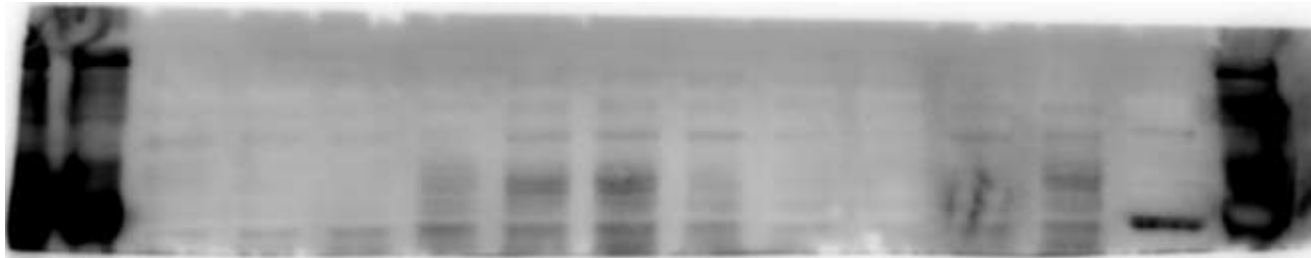
150
100
70



This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

LDLR
90-150KDa

150
100
70



This is the raw image taken after exposure.

GAPDH
36KDa

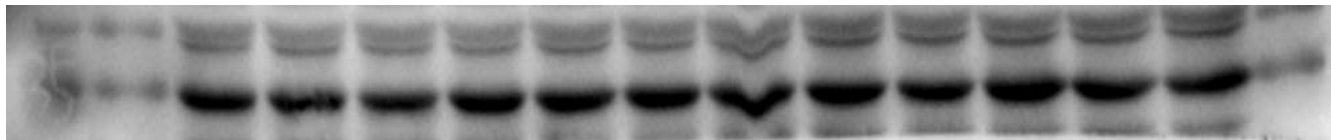
40
35



This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

GAPDH
36KDa

40
35



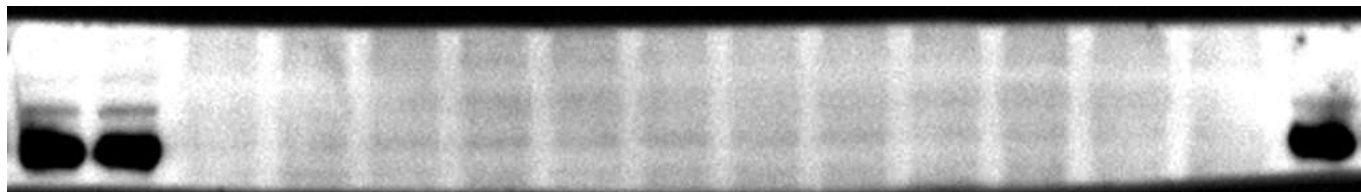
This is the raw image taken after exposure.

These blots correspond to Figure S2 (B)

LDLR expression in liver tissue

KDa **Maker** **Maker** A-LDLR^{vector} A-LDLR^{KD} O-LDLR^{vector} O-LDLR^{KD} **Maker**

LDLR 150
90-150KDa 100
70



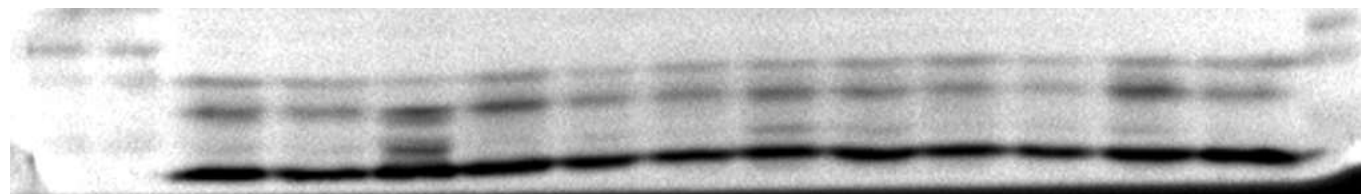
This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

LDLR 150
90-150KDa 100
70



This is the raw image taken after exposure.

GAPDH 50
36KDa 40
35



This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

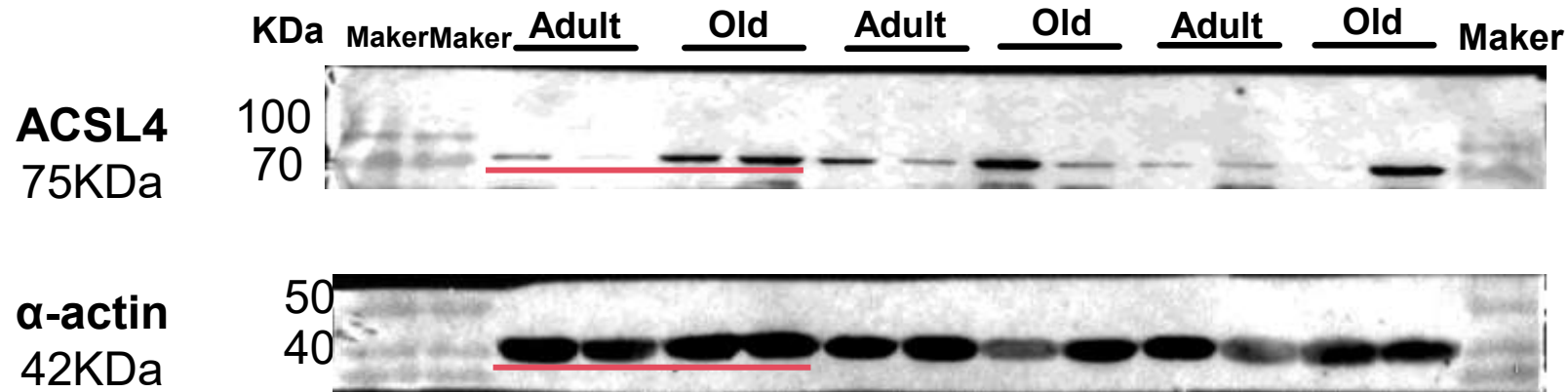
GAPDH 50
36KDa 40
35



This is the raw image taken after exposure.

These blots correspond to Figure S2 (C)

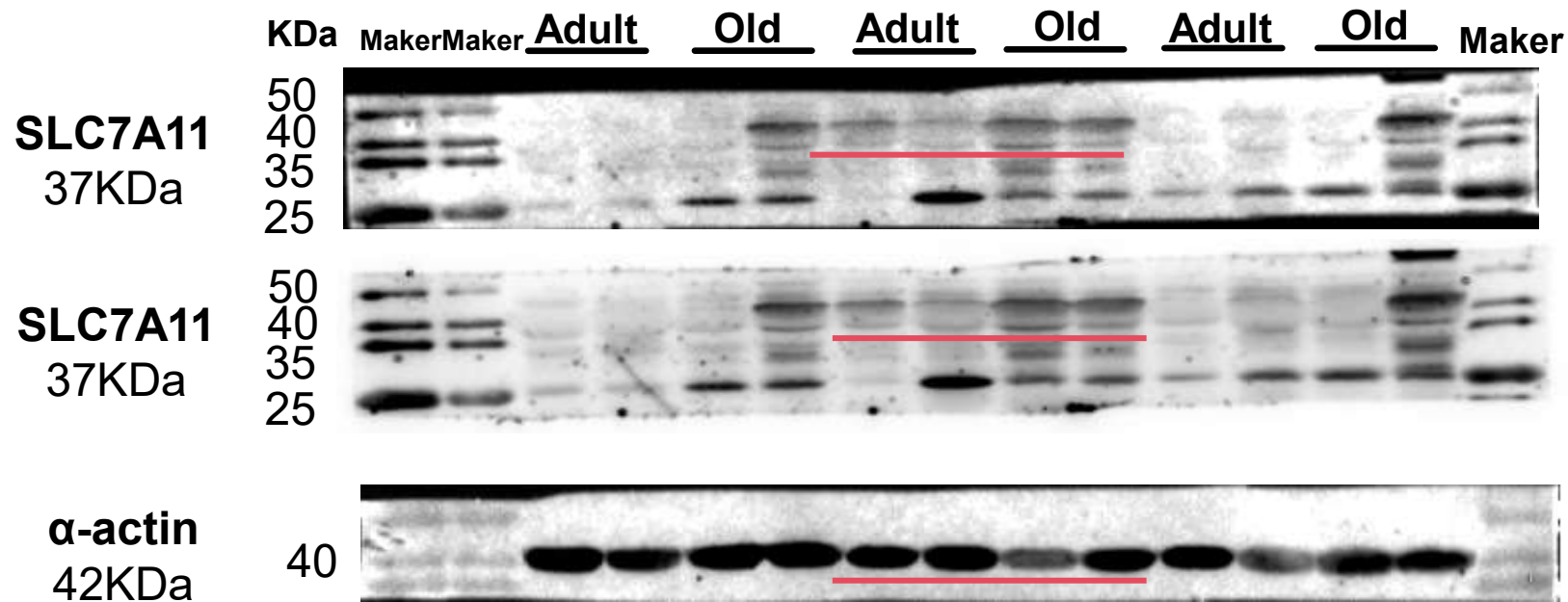
LDLR expression in intestine tissue



This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

The blots of ACSL4 in Supplemental Fig. S5 (A) corresponded to the blots marked by red line.

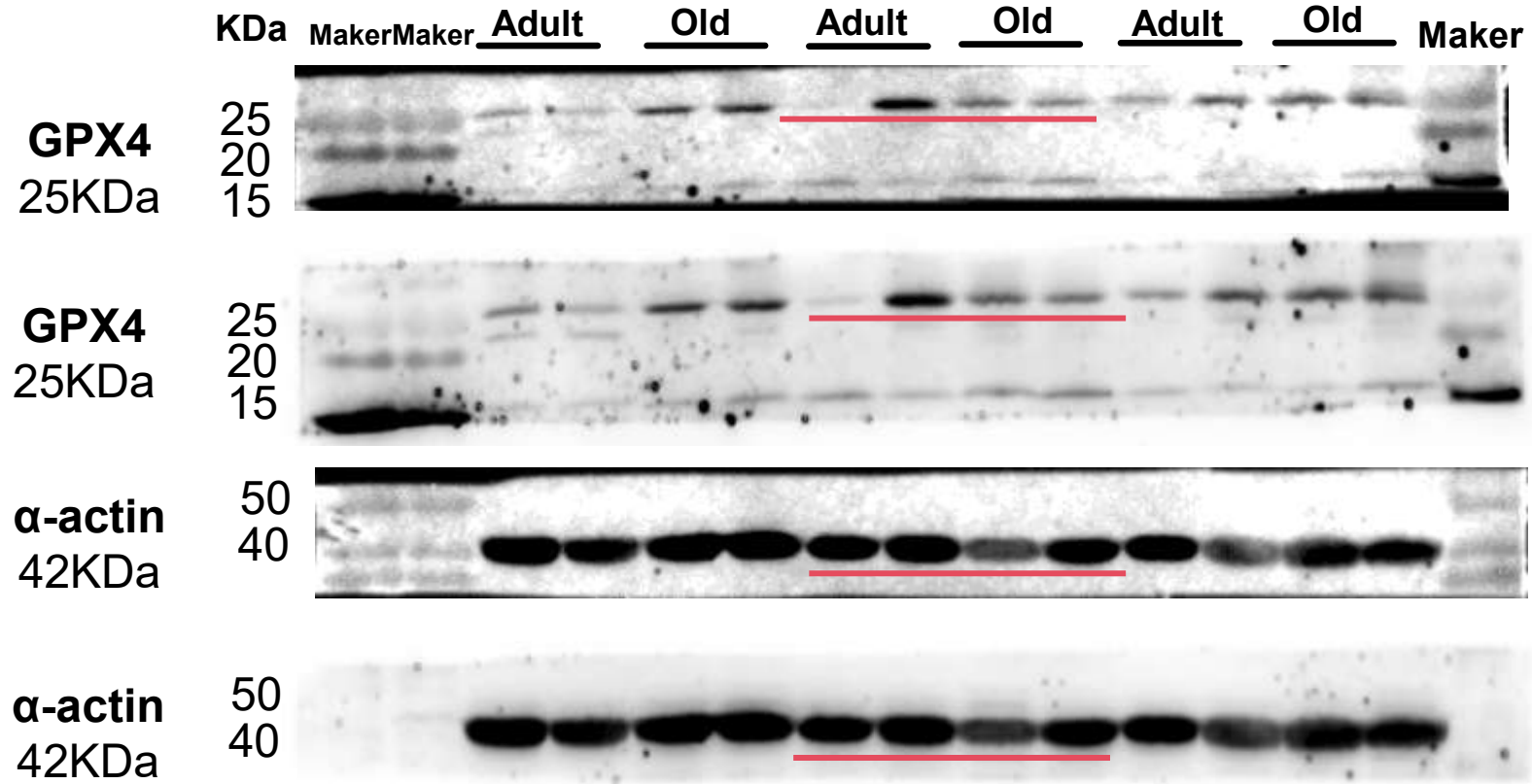


This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

The blots of SLC7A11 in Supplemental Fig. S5 (C) corresponded to the blots marked by red line.



This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

This image is a superimposition of the original image taken under natural light and the blots captured following exposure. The aim is to show both maker and protein blots.

This is the raw image taken after exposure

The blots of GPX4 in Supplemental Fig. S5 (E) corresponded to the blots marked by red line.