

**Dear editor**

**Thank you very much for your interest in our research work. Regarding our original blots, we have rechecked the data and displayed the results of multiple exposure images. We have also outlined the membrane edges with black box lines. Although we made efforts to supplement the imprinting results, there are still some imprints where the marker is not clearly visible due to the exposure process, despite not using a multiple exposure protocol.. However, we want to emphasize that we have not edited or spliced any protein images, and all the images are authentic.**

**To eliminate any ambiguity, we have taken measures to better present our protein data. We have provided detailed experimental methods and procedures, explaining the antibody incubation conditions and protein staining process (in the experimental methods section of the manuscript).**

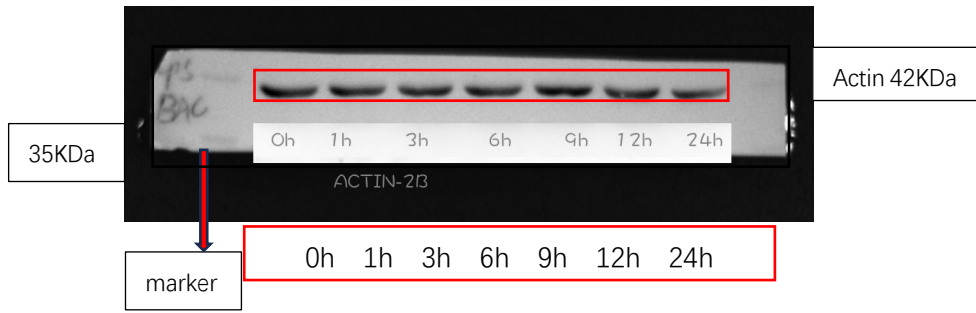
**Furthermore, the molecular weight of the antibodies described in the manual differs from the actual molecular weight of the markers corresponding to our experimental results. This discrepancy may be related to cell type or measurement errors of the markers.**

**We understand the rigor and integrity principles of scientific research, and in our study, we have always adhered to the principles of honesty, transparency, and reproducibility.**

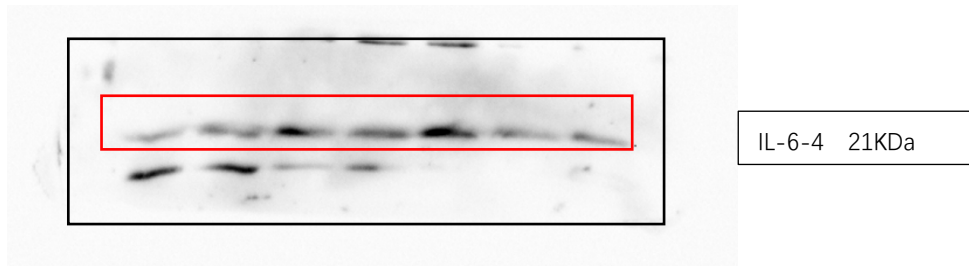
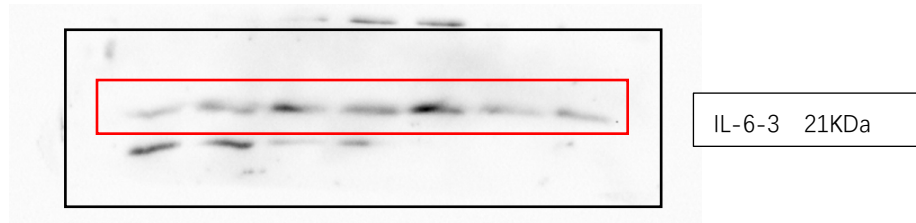
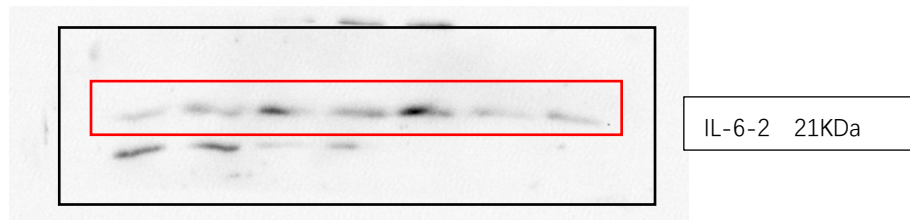
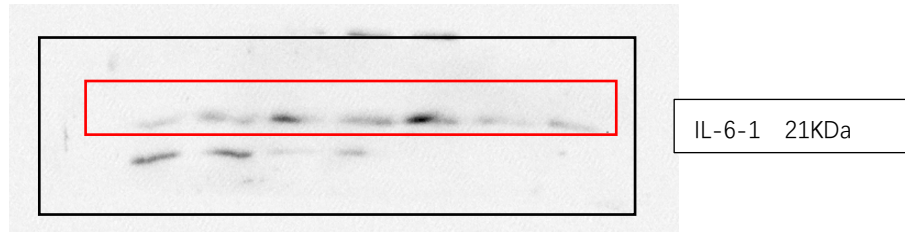
**Thank you again for your interest and support in our research work. We look forward to sharing the results of this important study with you.**

**Sincerely,  
Huimin Hou**

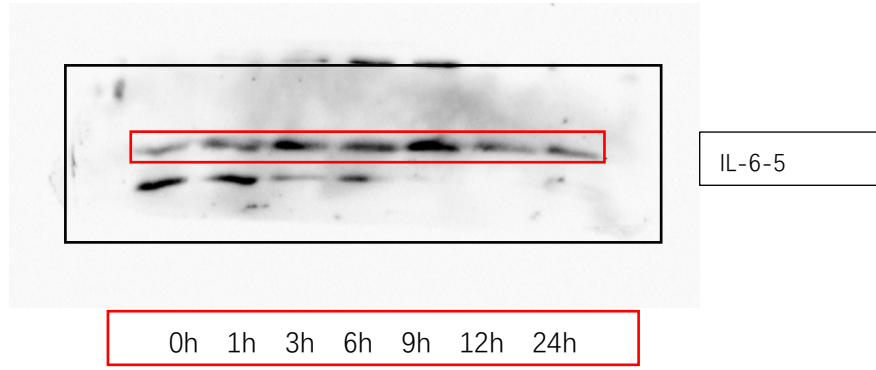
**Fig 2B**



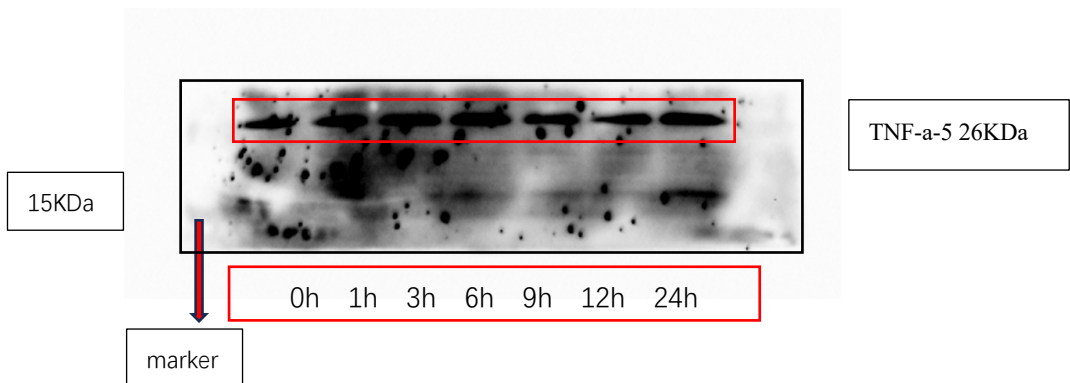
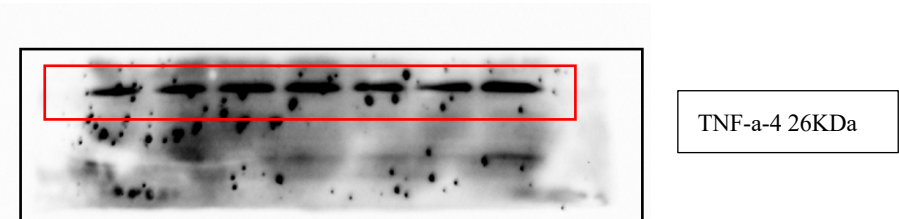
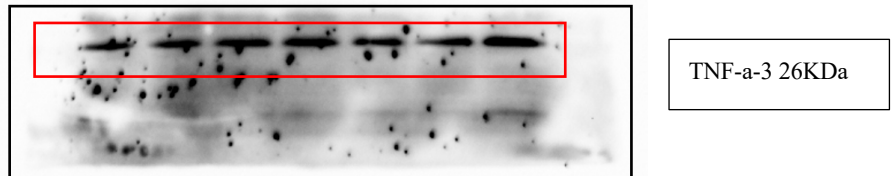
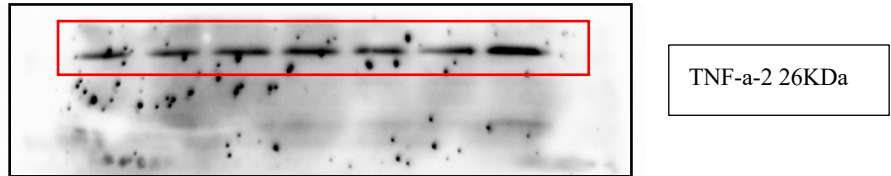
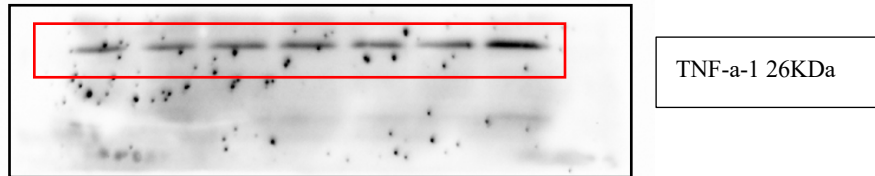
**multiple exposure images of IL-6**





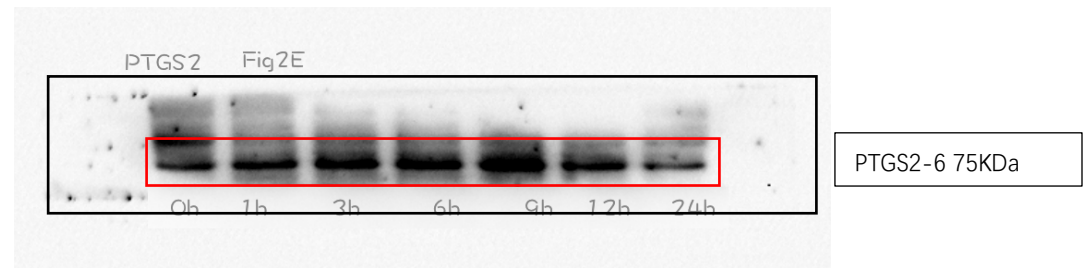
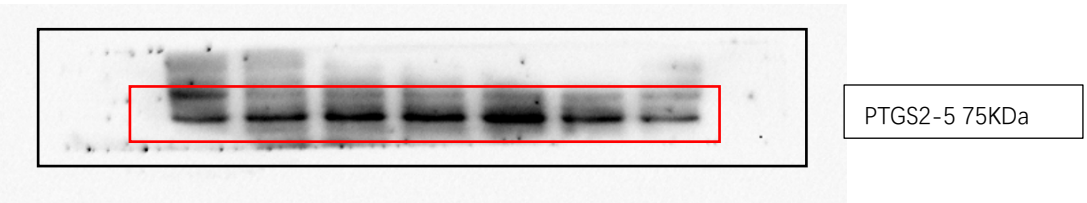
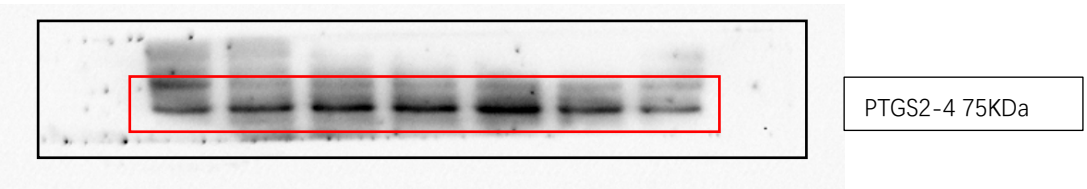
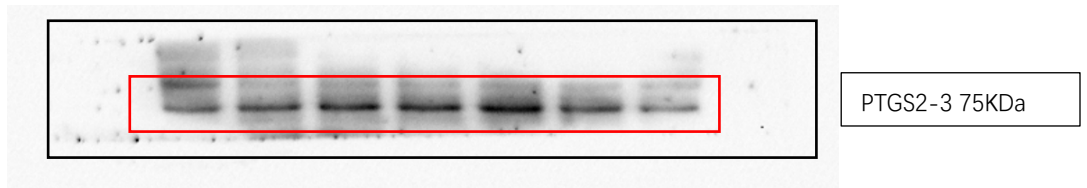
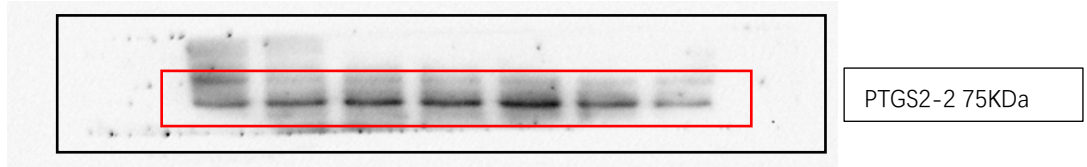
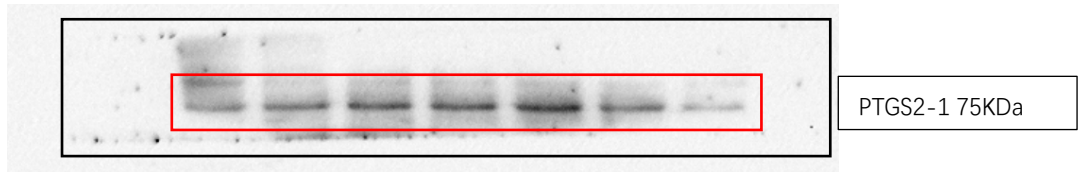


multiple exposure images of TNF-a





multiple exposure images of PTGS2



0h 1h 3h 6h 9h 12h 24h

0h 1h 3h 6h 9h 12h 24h

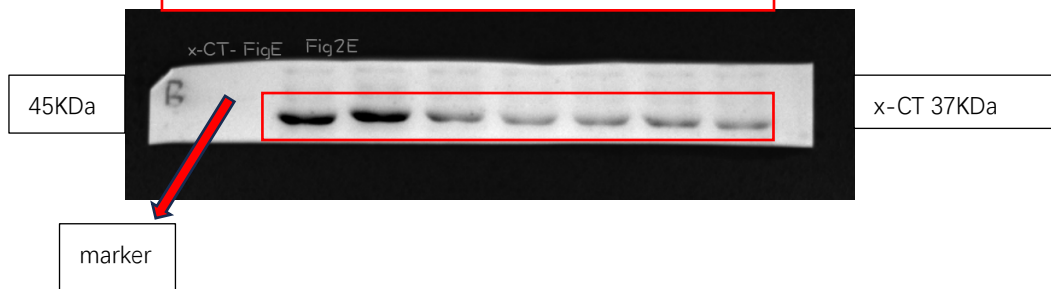
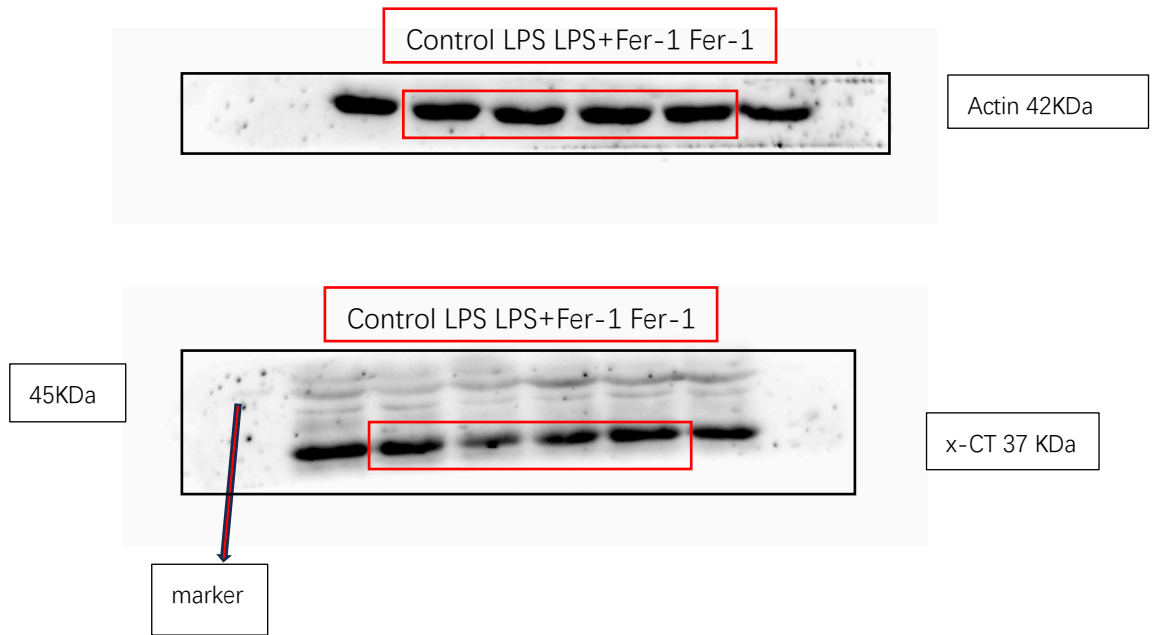
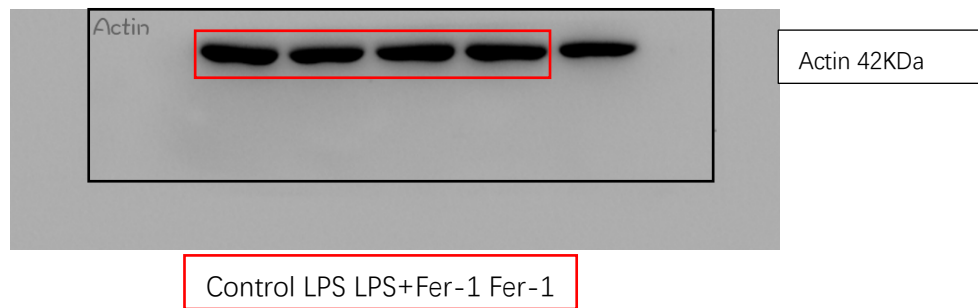


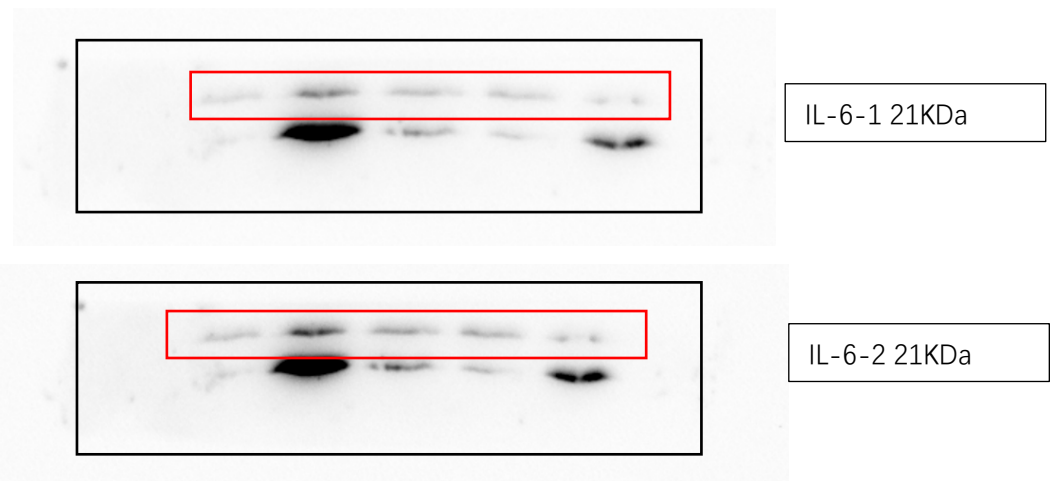
Fig 3E

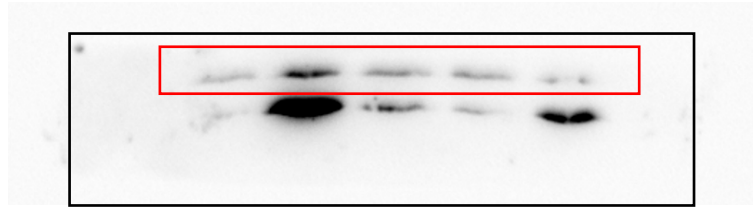


multiple exposure images of Actin

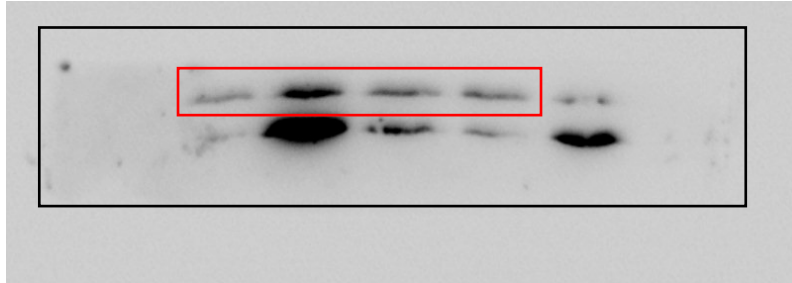


multiple exposure images of IL-6



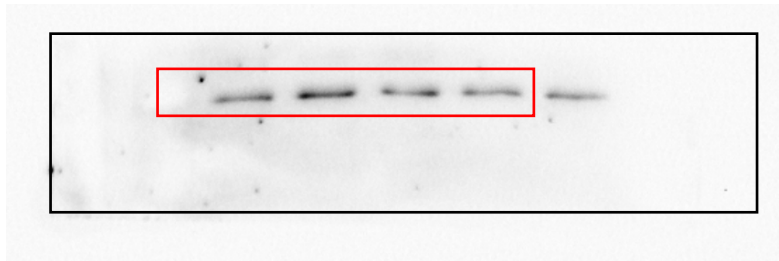


IL-6-3 21KDa

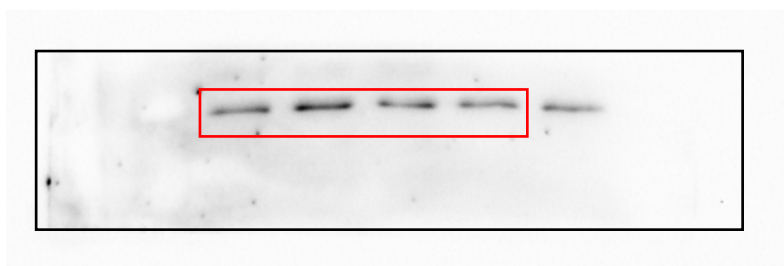


IL-6-4 21KDa

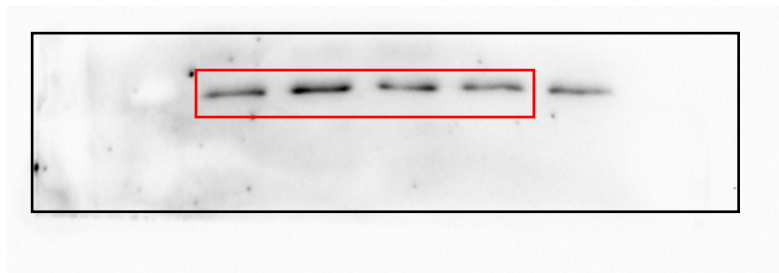
multiple exposure images of TNF-a



TNF-a-1 26KDa

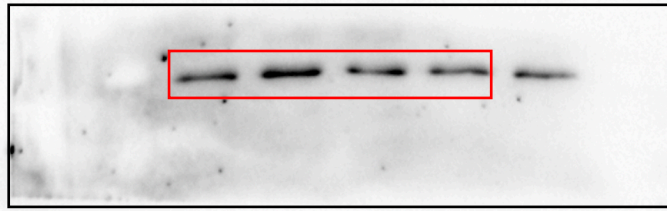


TNF-a-2 26KDa



TNF-a-3 26KDa

Control LPS LPS+Fer-1 Fer-1



TNF-a-4 26KDa

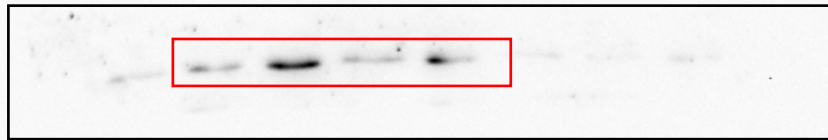
Control LPS LPS+Fer-1 Fer-1



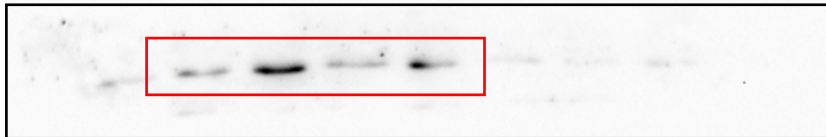
Actin 42KDa

Control LPS LPS+Fer-1 Fer-1

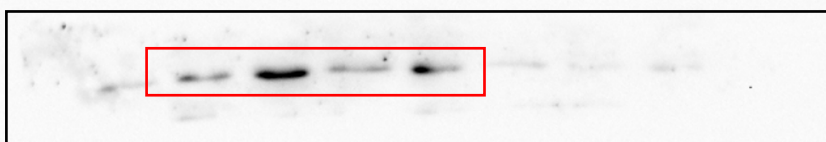
multiple exposure images of HMGB1



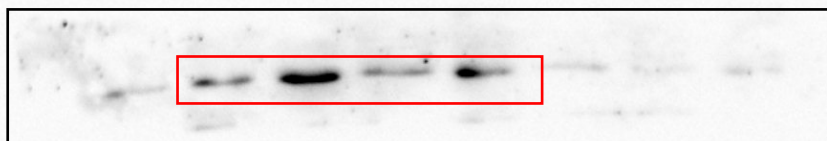
HMGB1-1 25KDa



HMGB1-2 25KDa



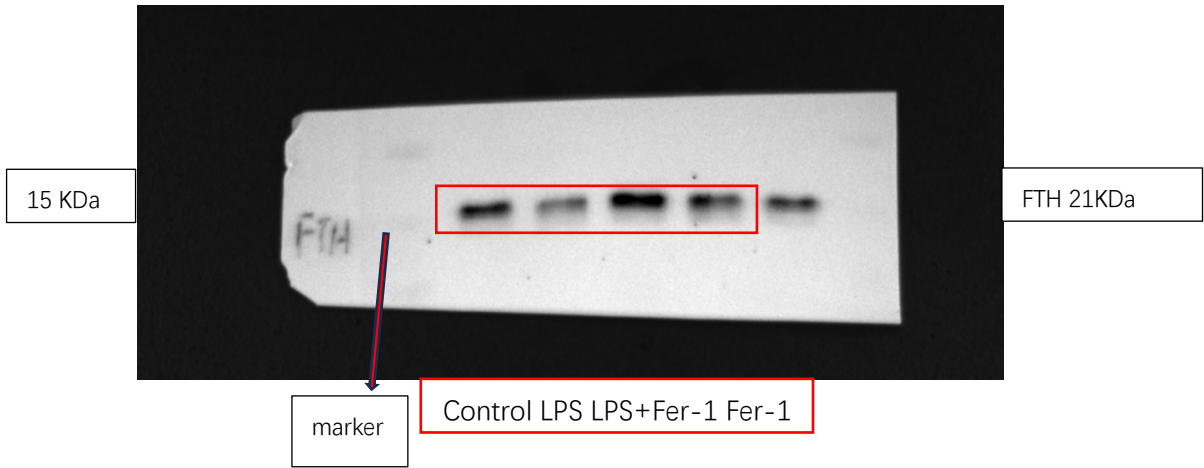
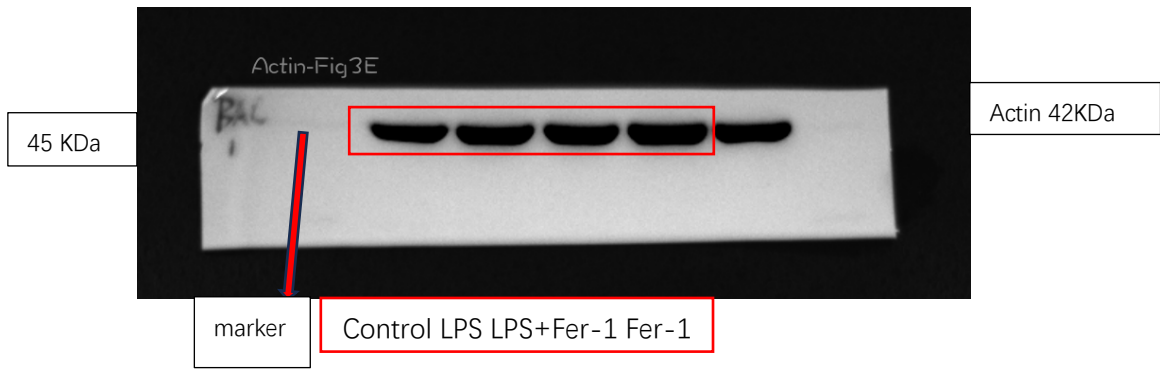
HMGB1-3 25KDa



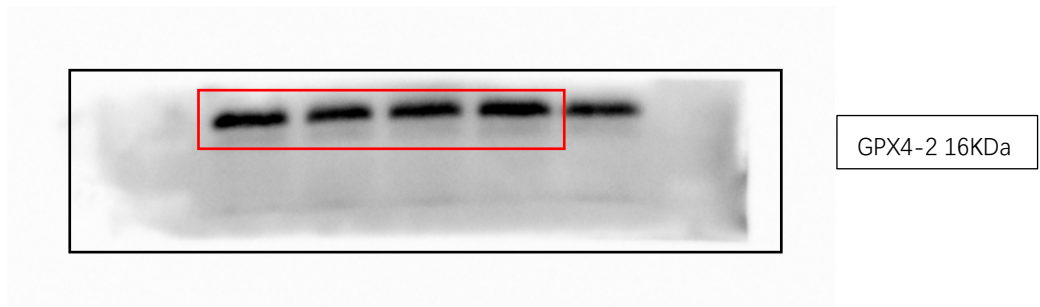
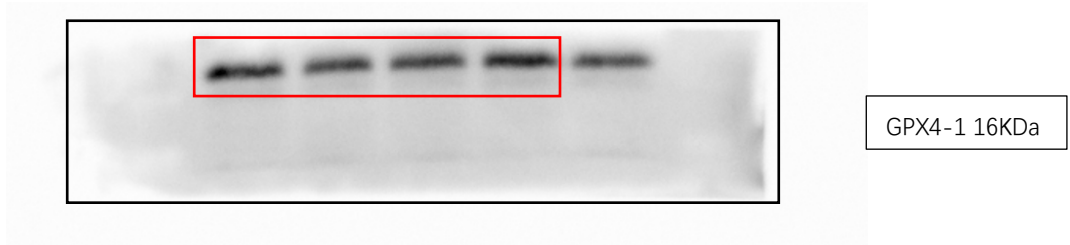
HMGB1-4 25KDa

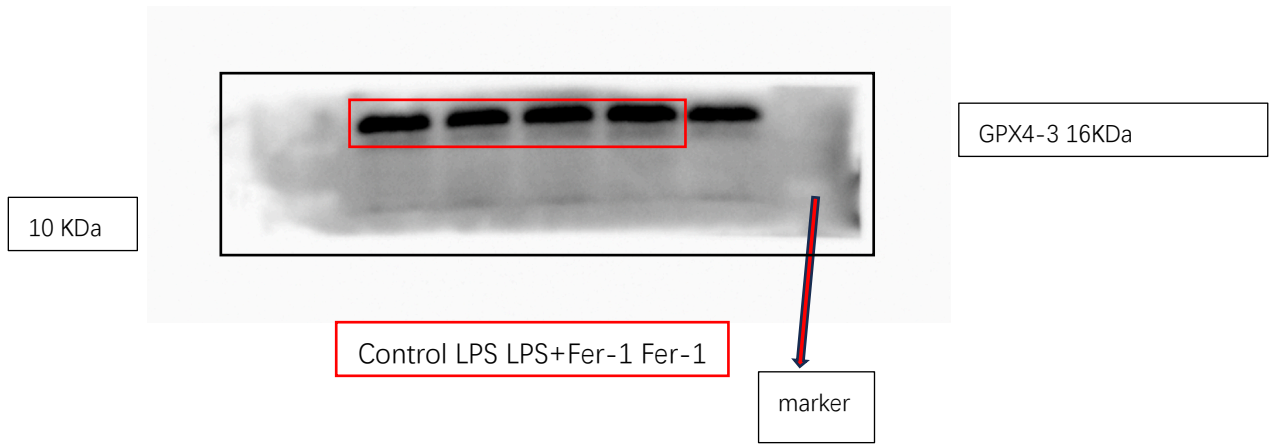
Control LPS LPS+Fer-1 Fer-1



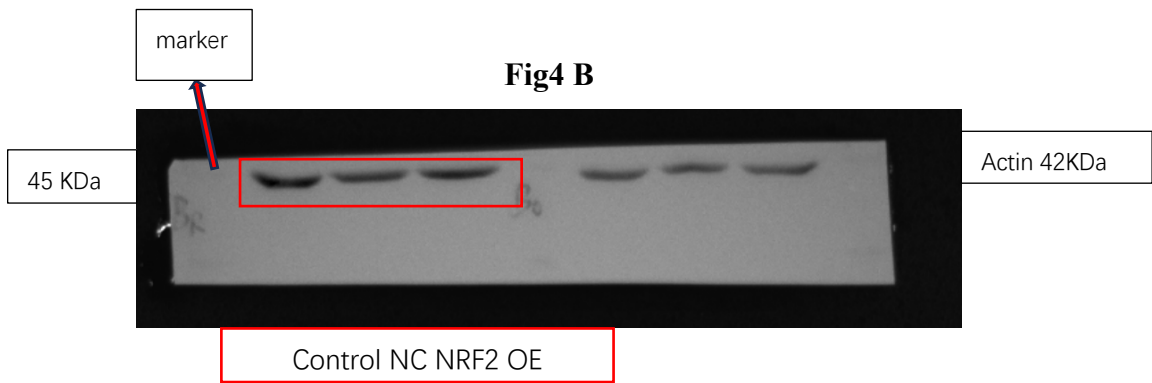


multiple exposure images of GPX4

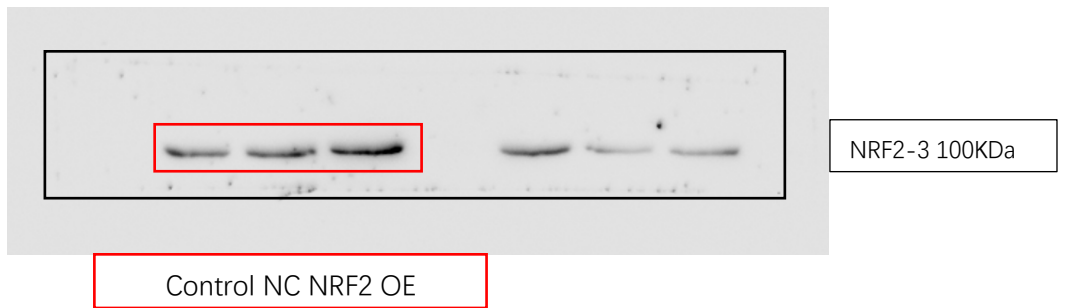
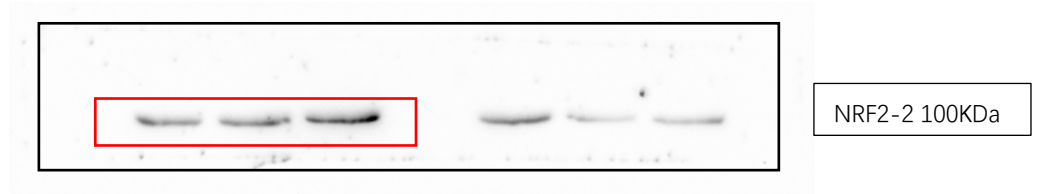
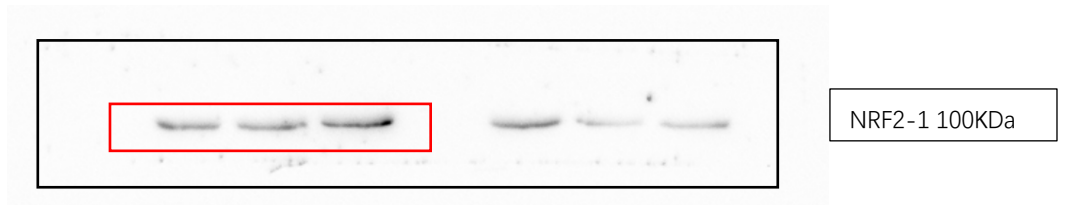




**Fig4 B**



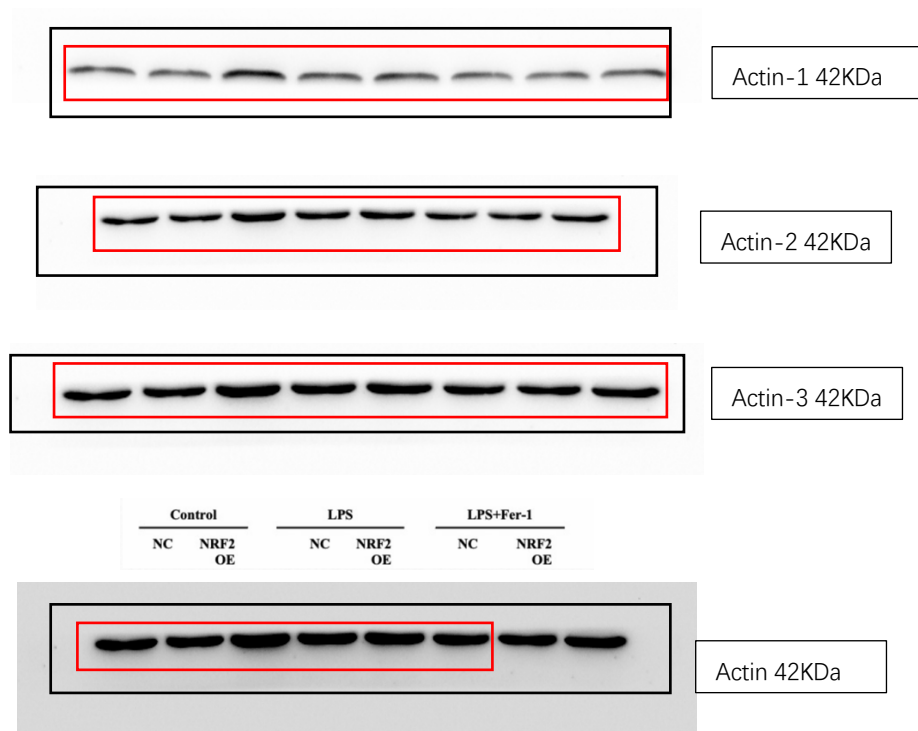
multiple exposure images of NRF2



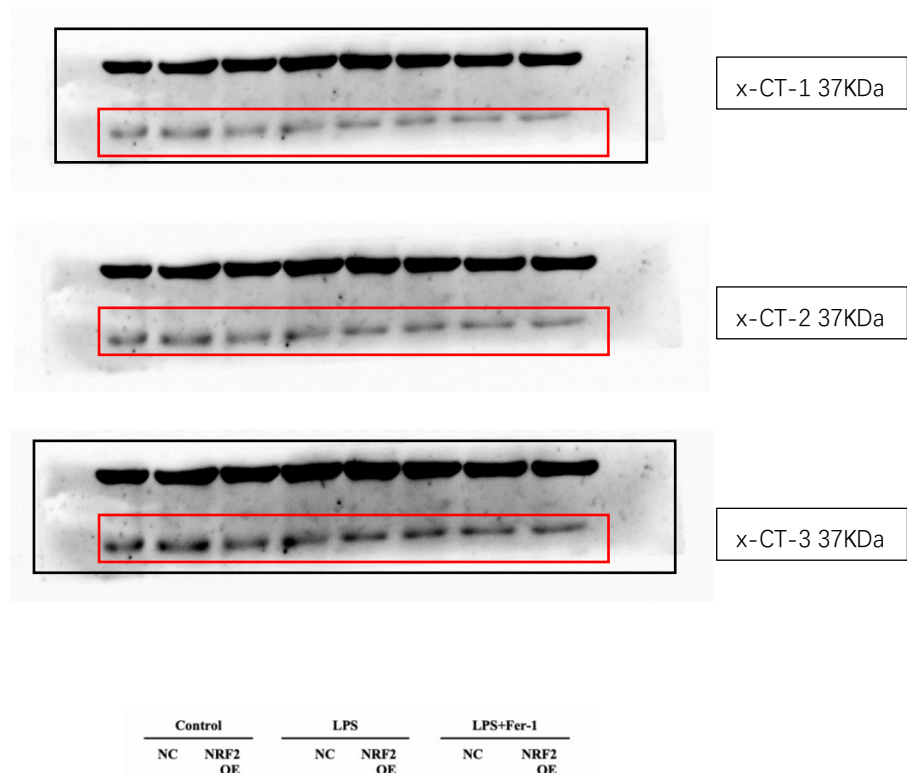


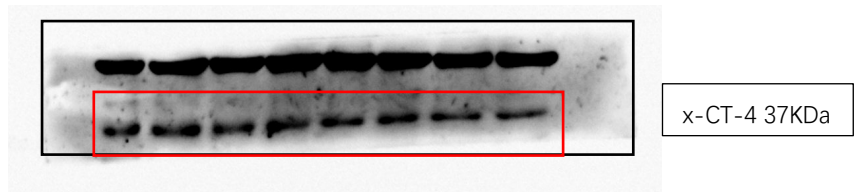
**Fig 4F**

multiple exposure images of Actin

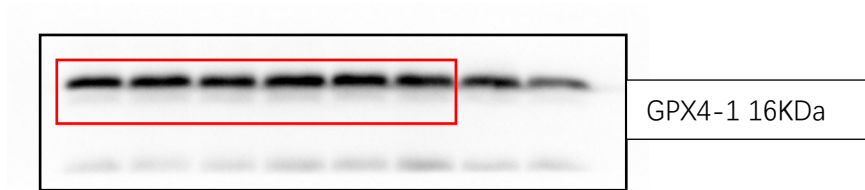


multiple exposure images of x-CT

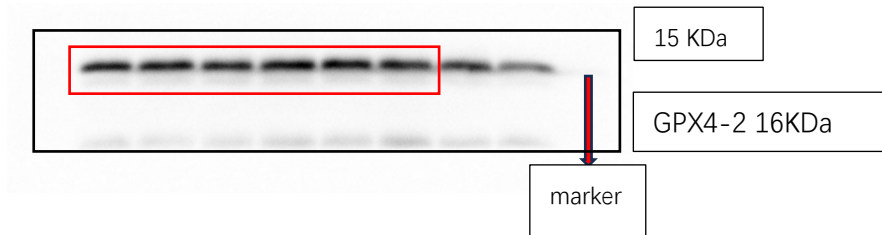




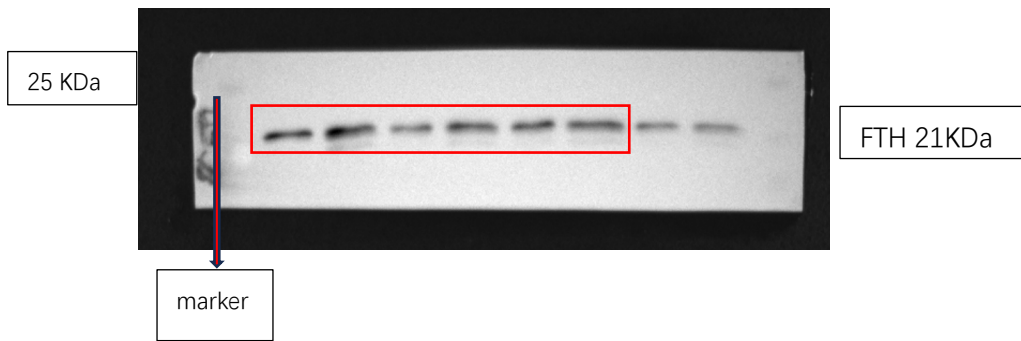
multiple exposure images of GPX4



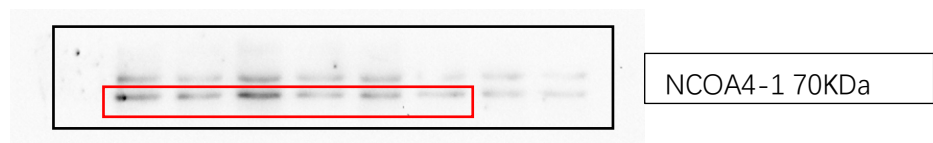
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NC	NRF2 OE	NC	NRF2 OE	NC	NRF2 OE

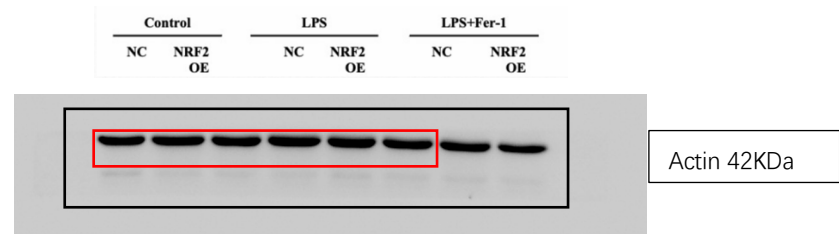
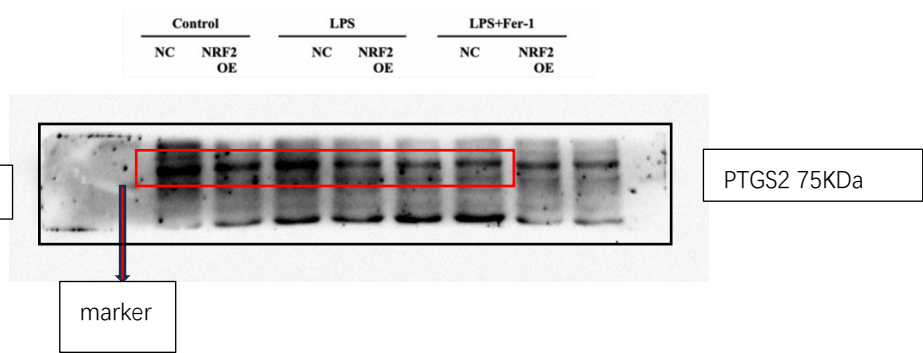
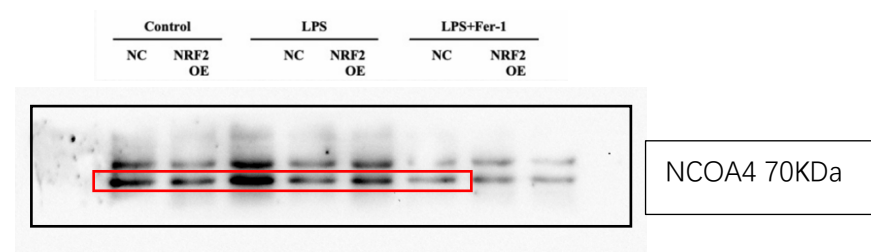
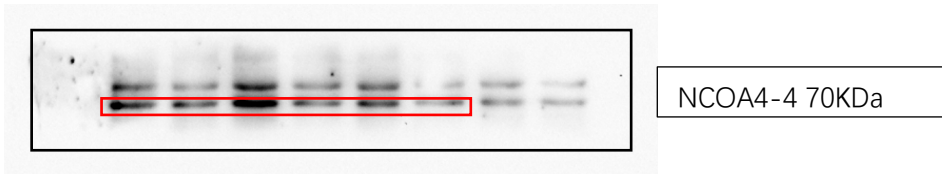
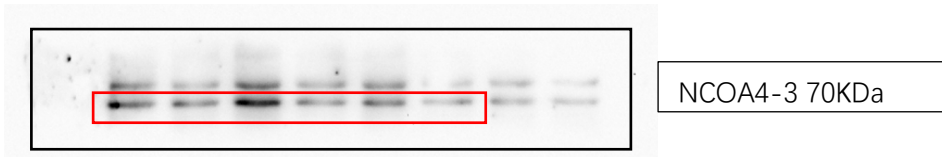
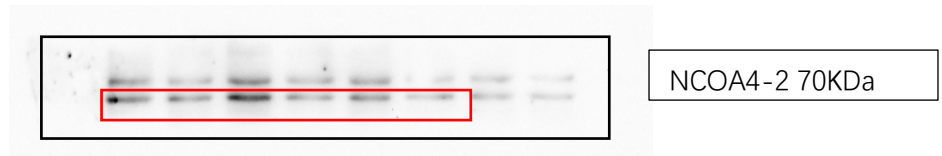


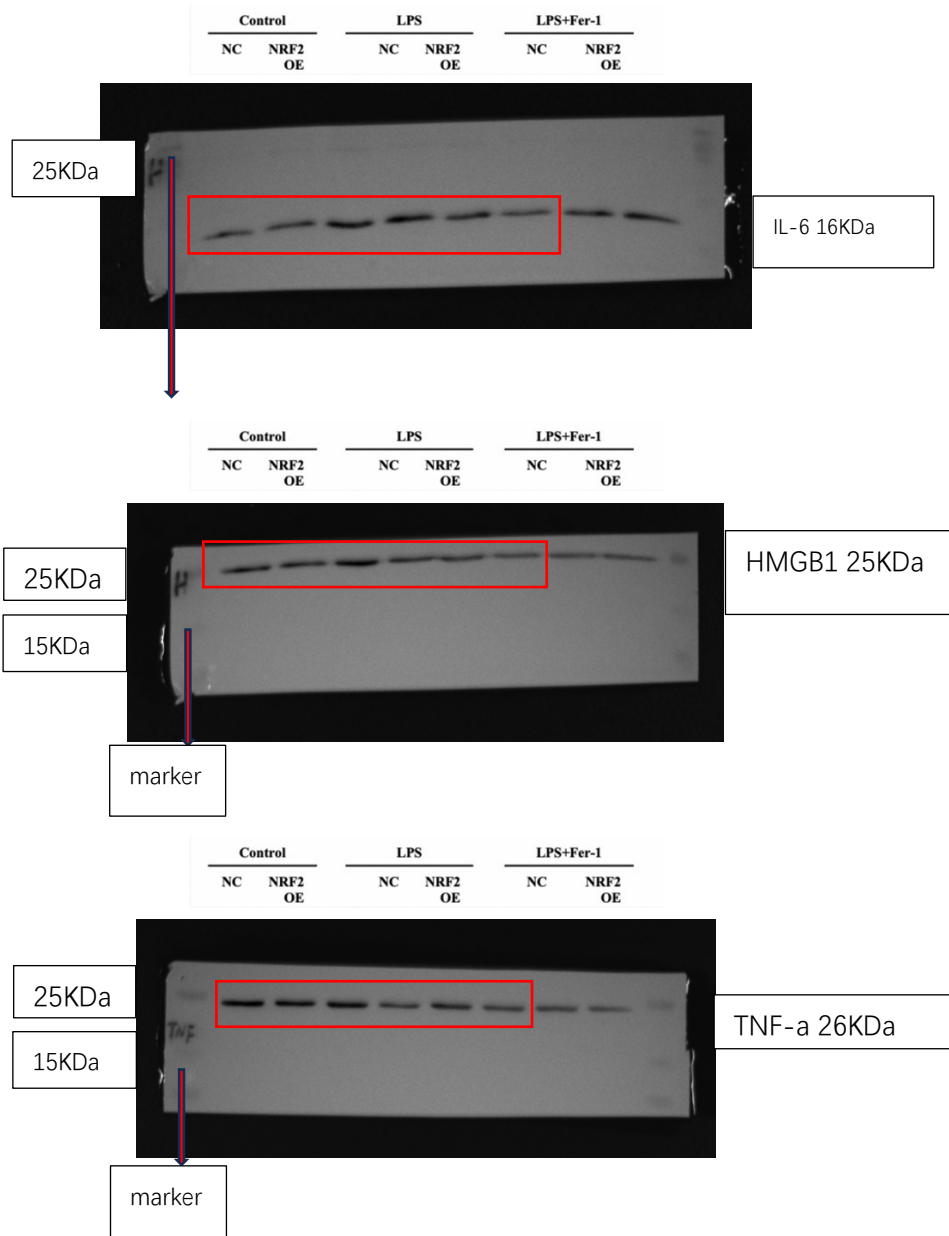
Control		LPS		LPS+Fer-1	
NC	NRF2 OE	NC	NRF2 OE	NC	NRF2 OE



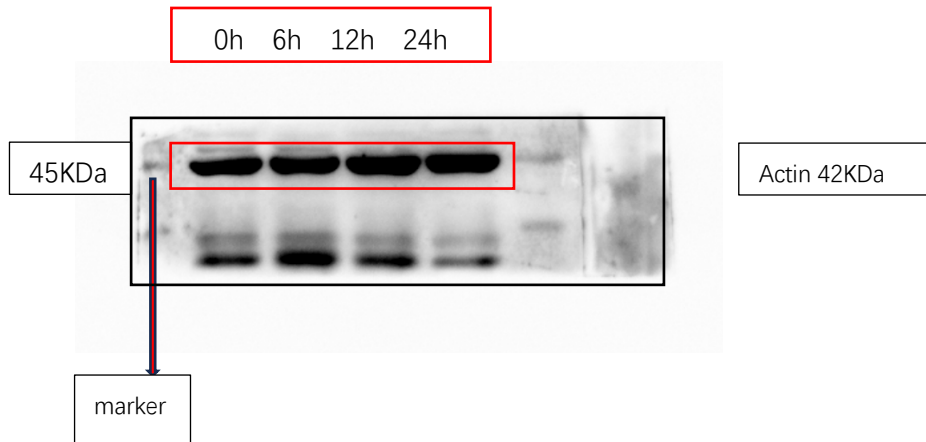
multiple exposure images of NCOA4

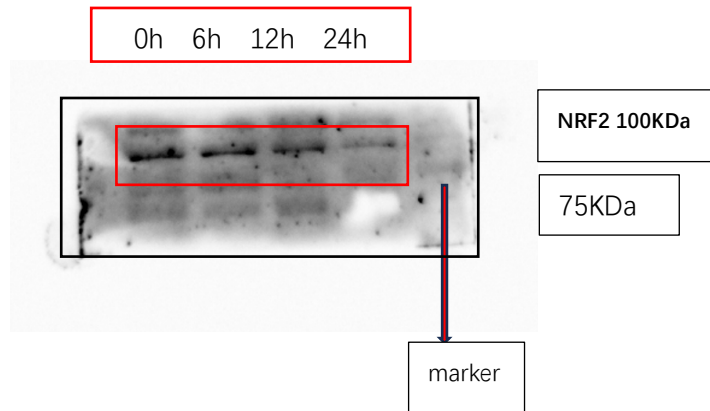






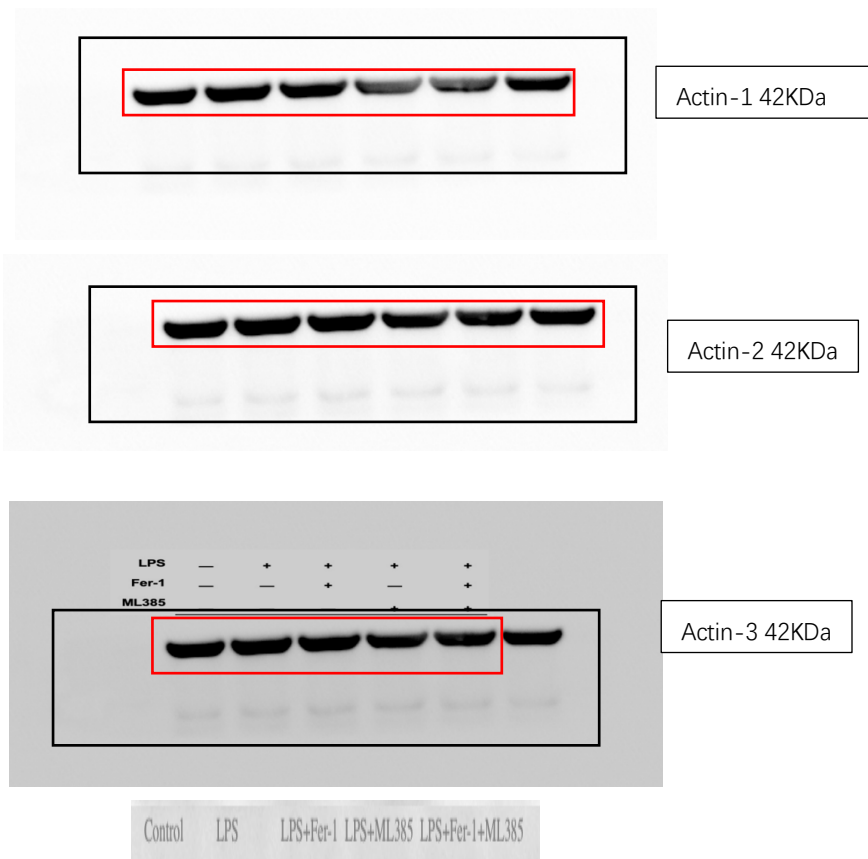
**Fig 5A**



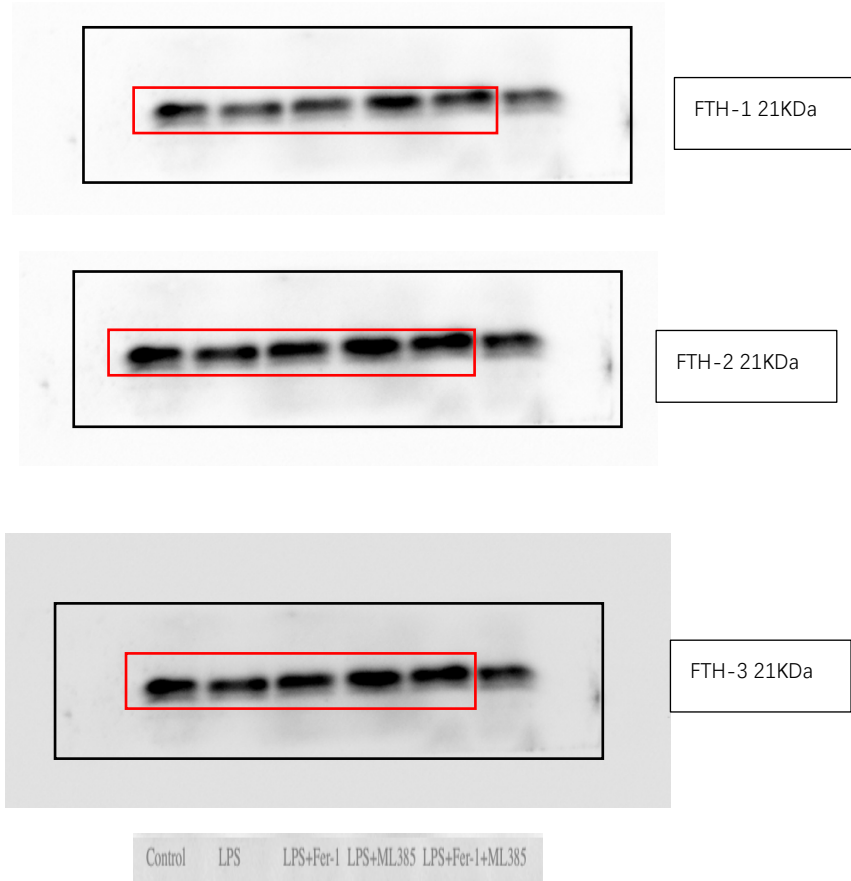


**Fig 5E**

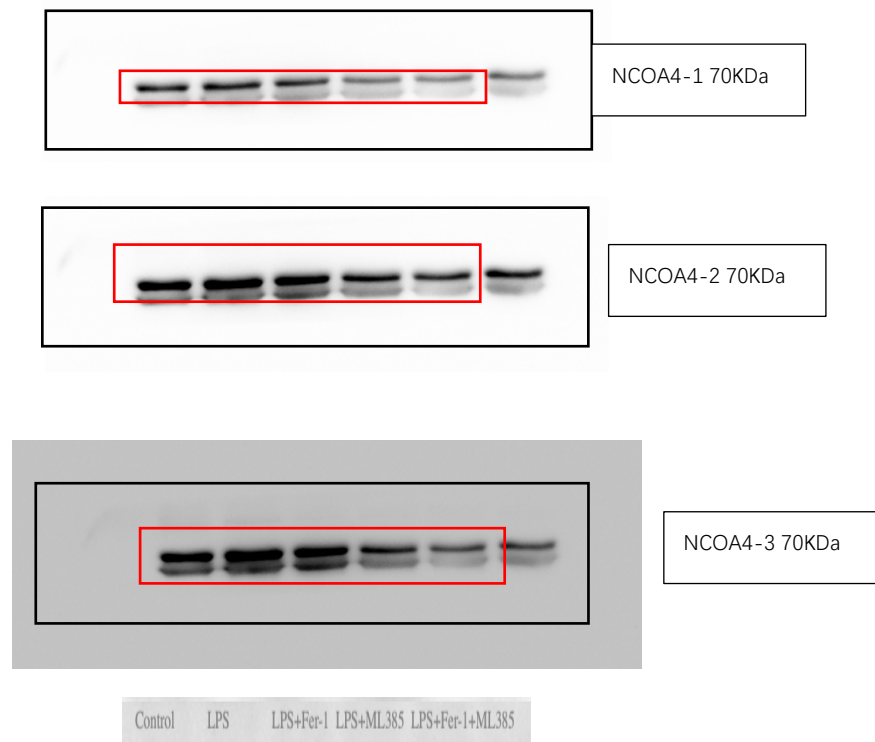
multiple exposure images of Actin

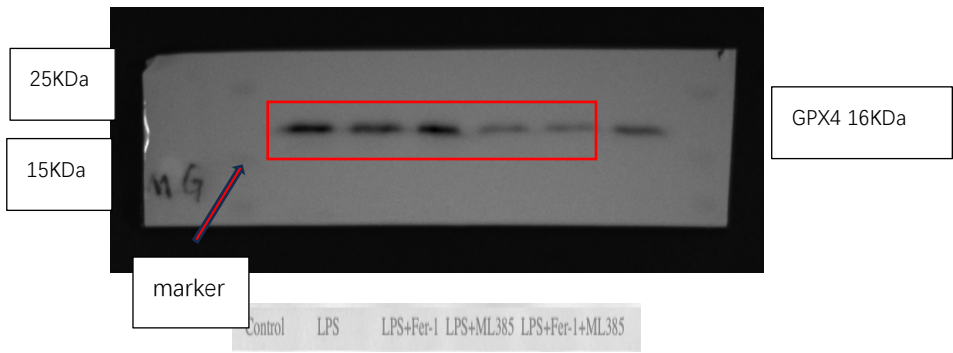


multiple exposure images of FTH

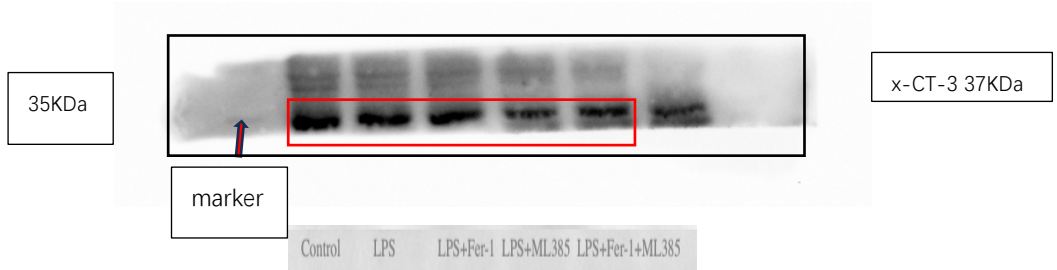
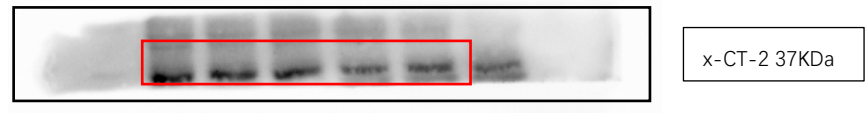
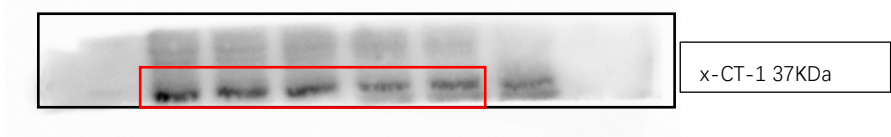


**multiple exposure images of NCOA4**

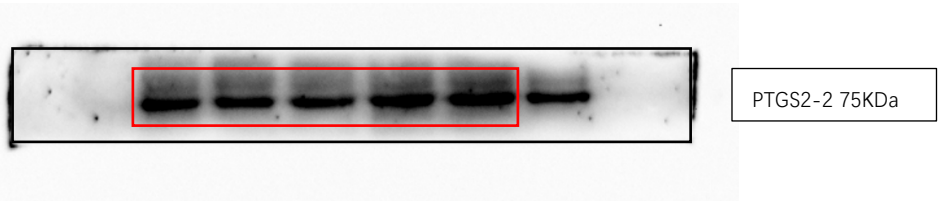
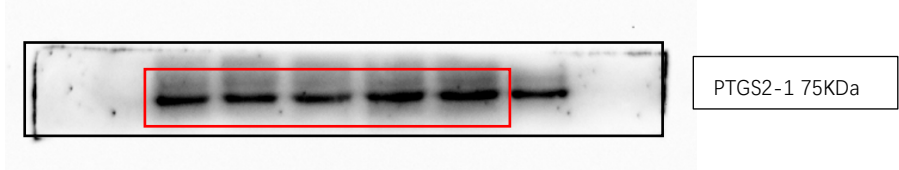


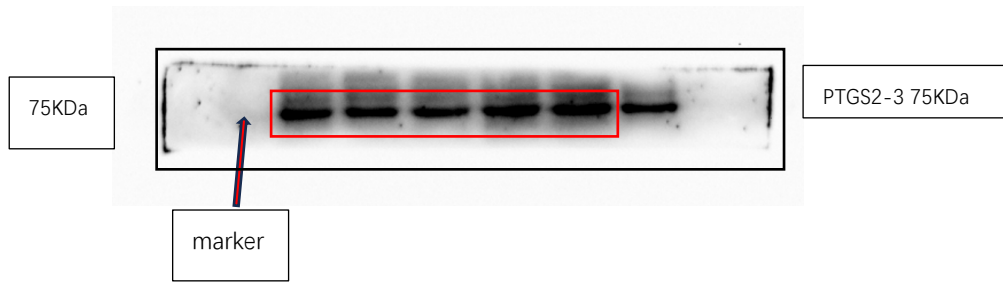


multiple exposure images of x-CT



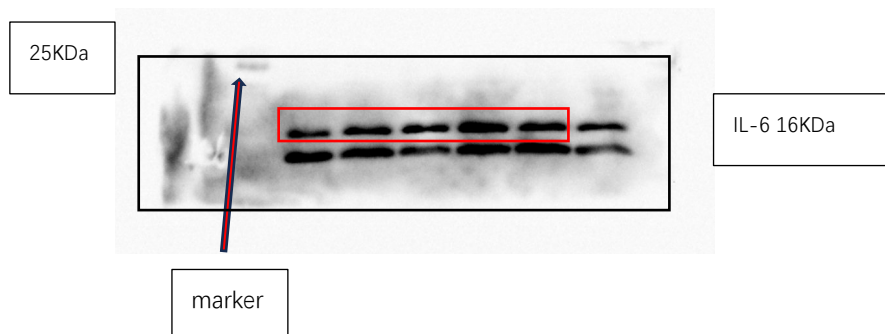
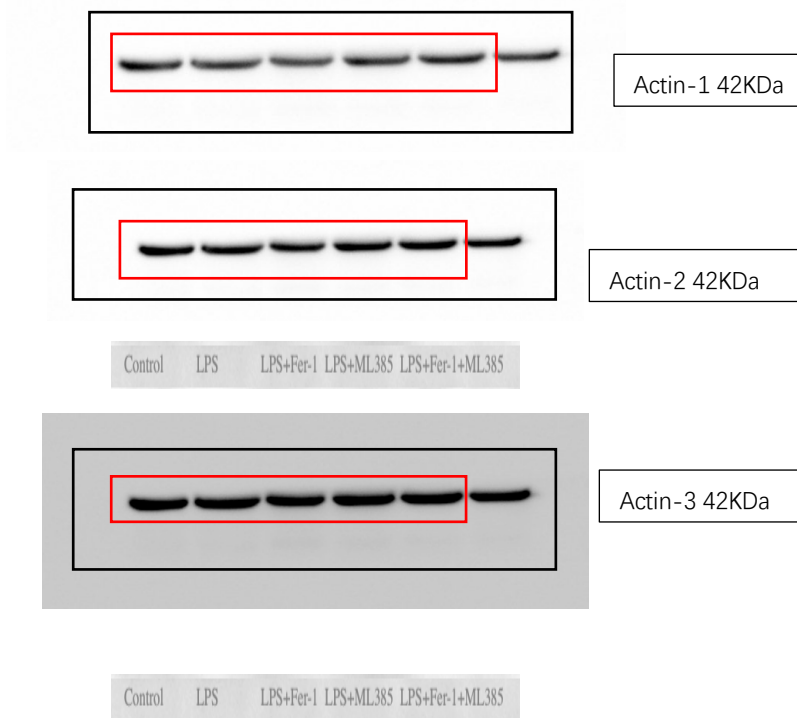
multiple exposure images of PTGS2





**Fig 5F**

multiple exposure images of Actin







multiple exposure images of HMGB1

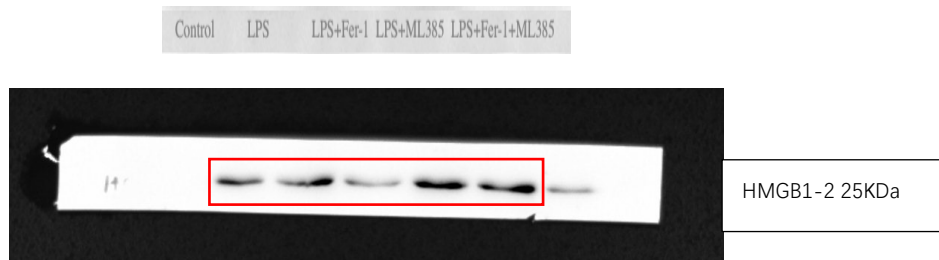
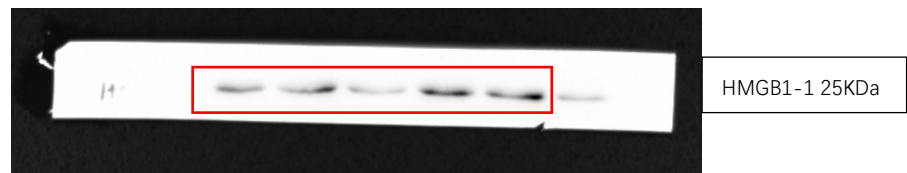
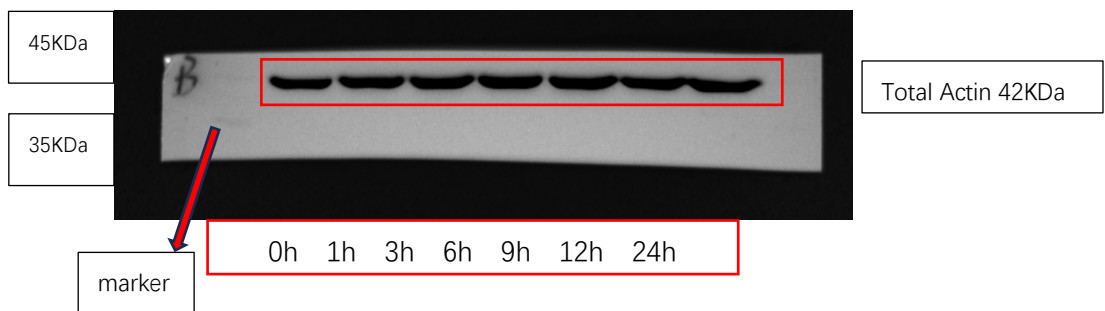
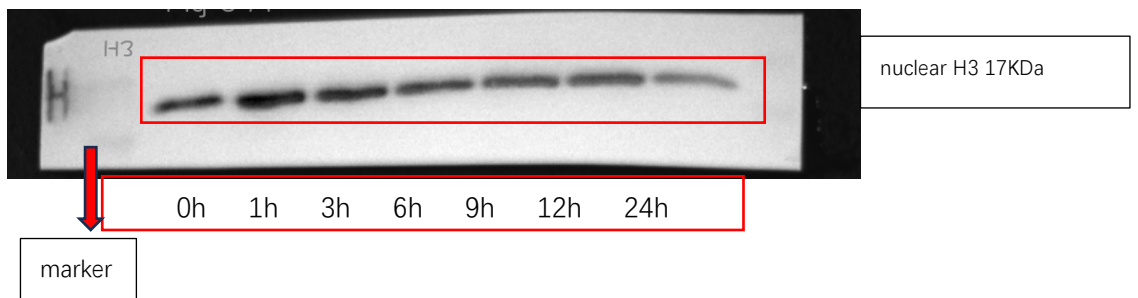
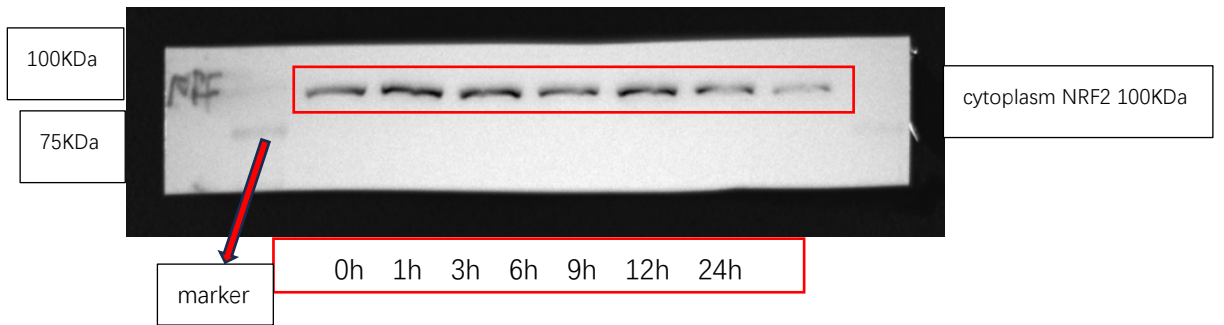
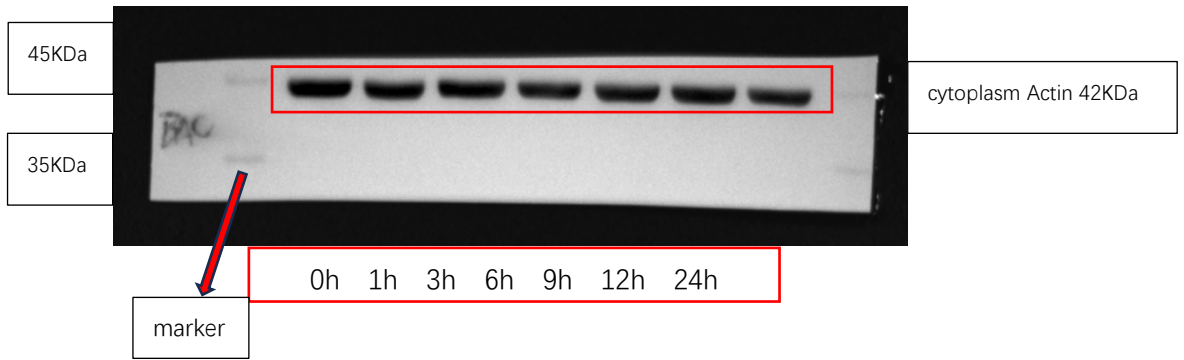
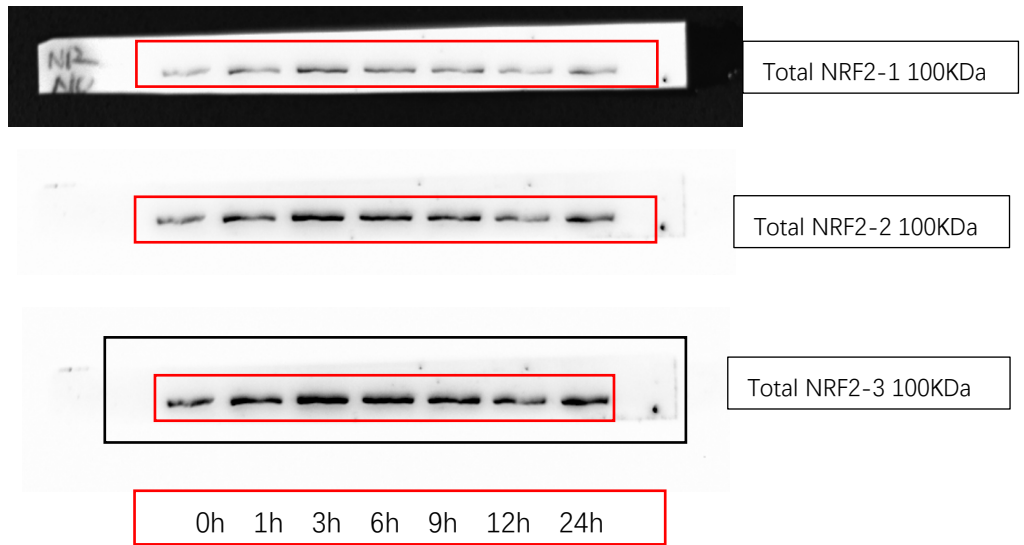
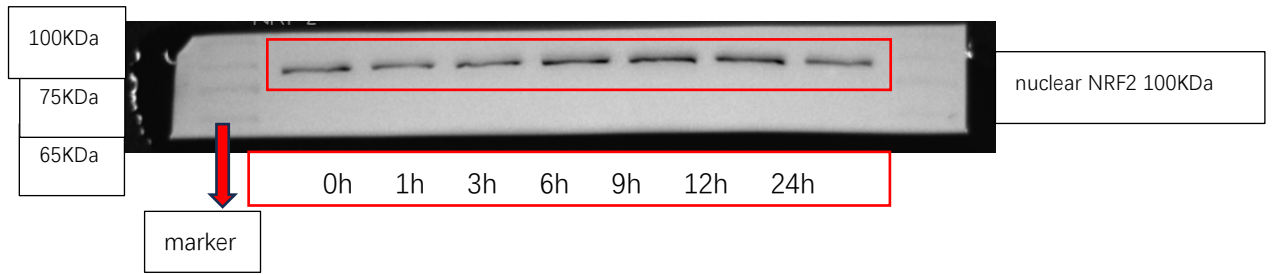


Fig 6A

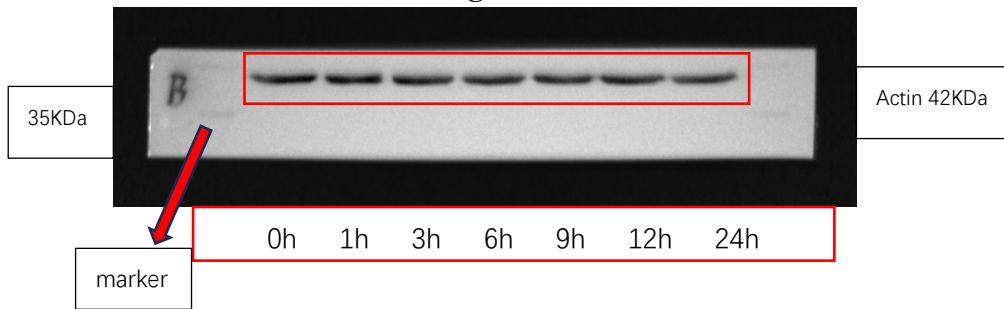


multiple exposure images of Total NRF2

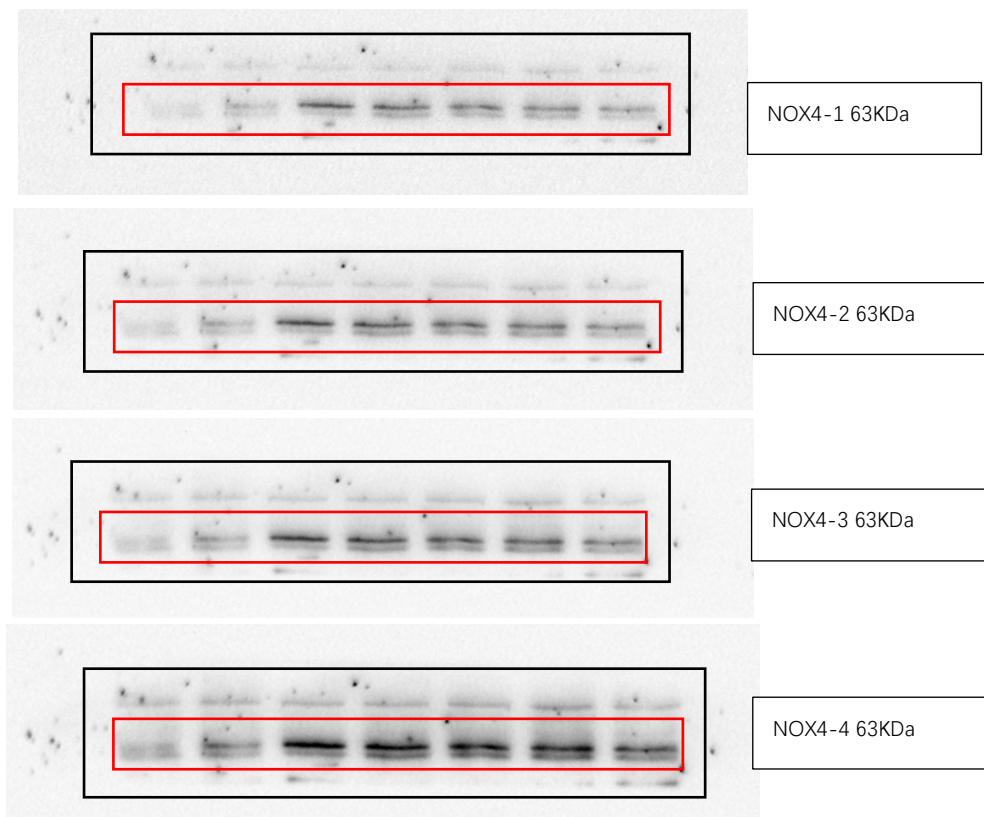


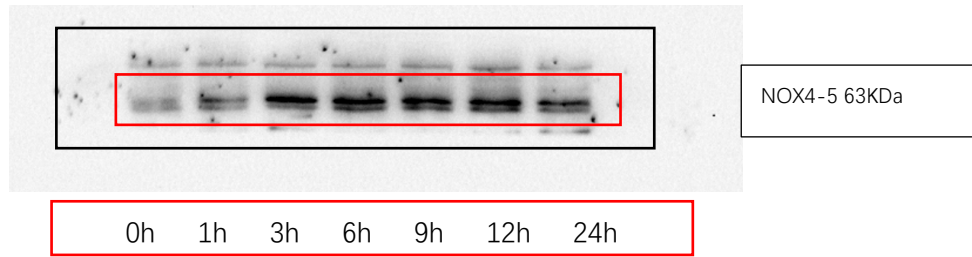


**Fig 6C**

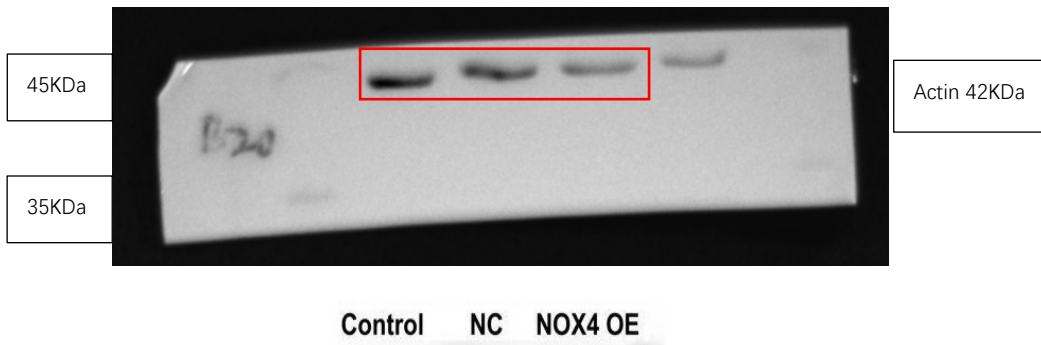


**multiple exposure images of Total NOX4**

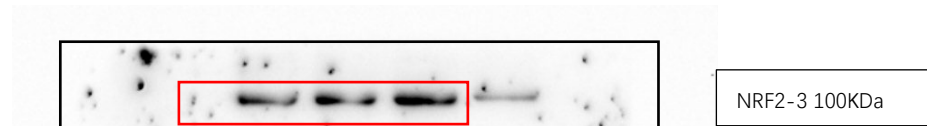
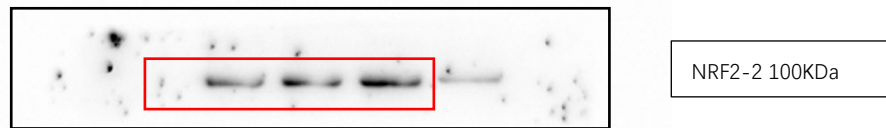
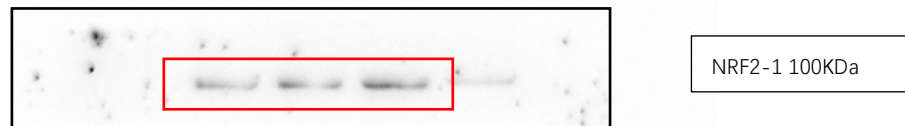


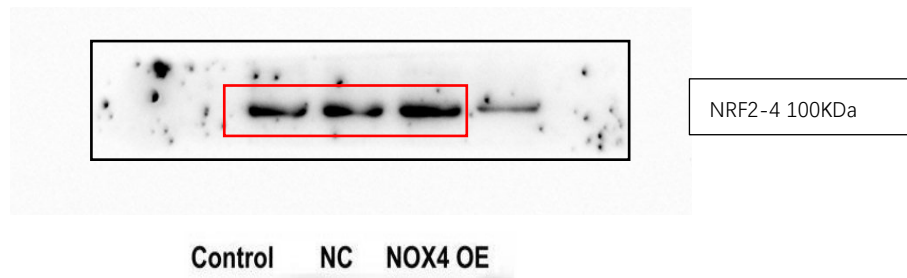


**Fig 6E**



multiple exposure images of NRF2





multiple exposure images of NOX4

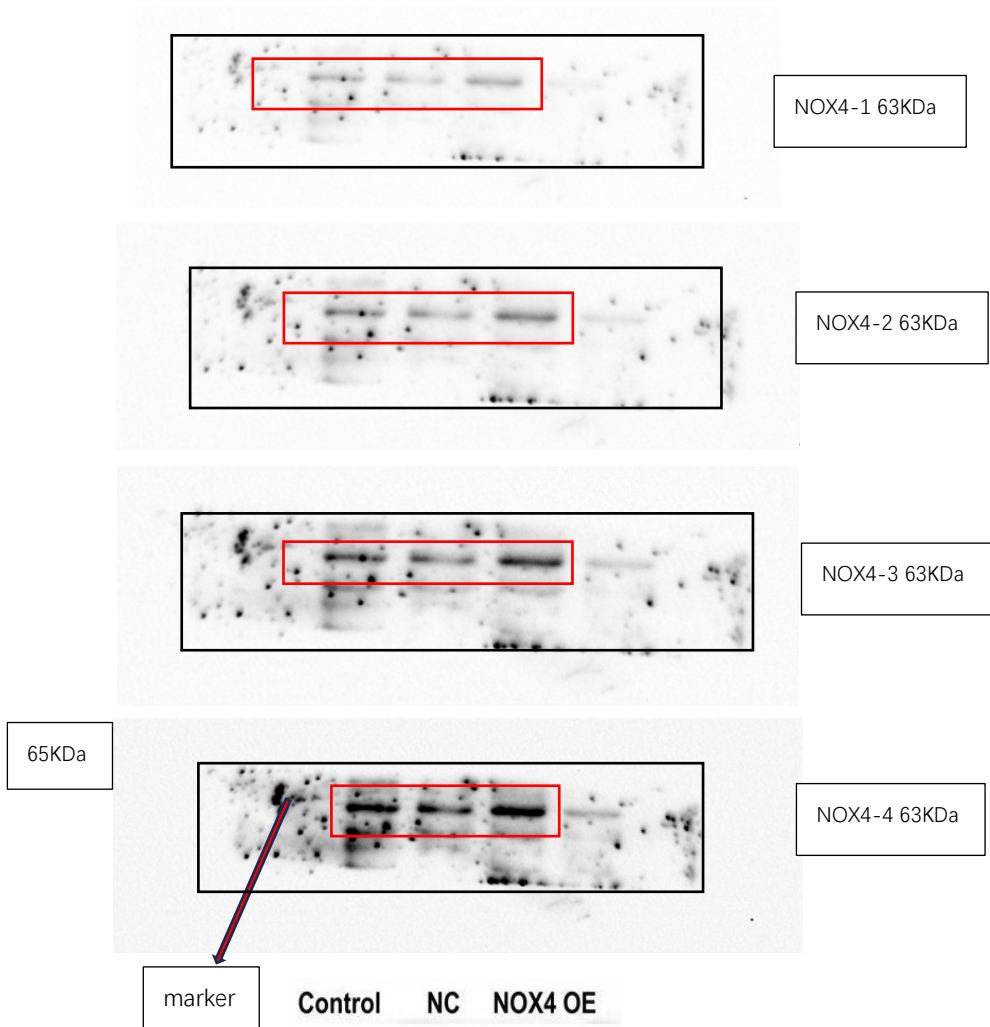
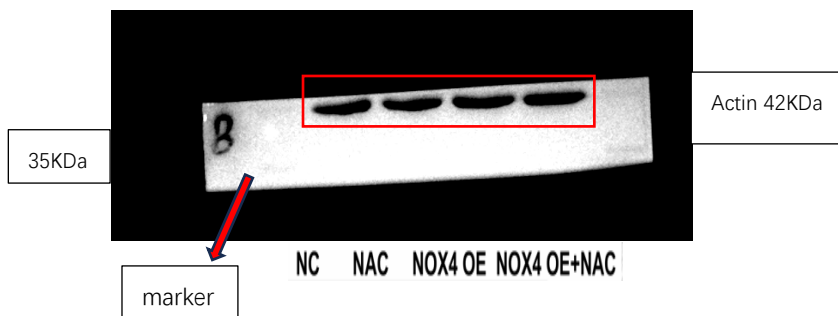


Fig 6G



multiple exposure images of NOX4

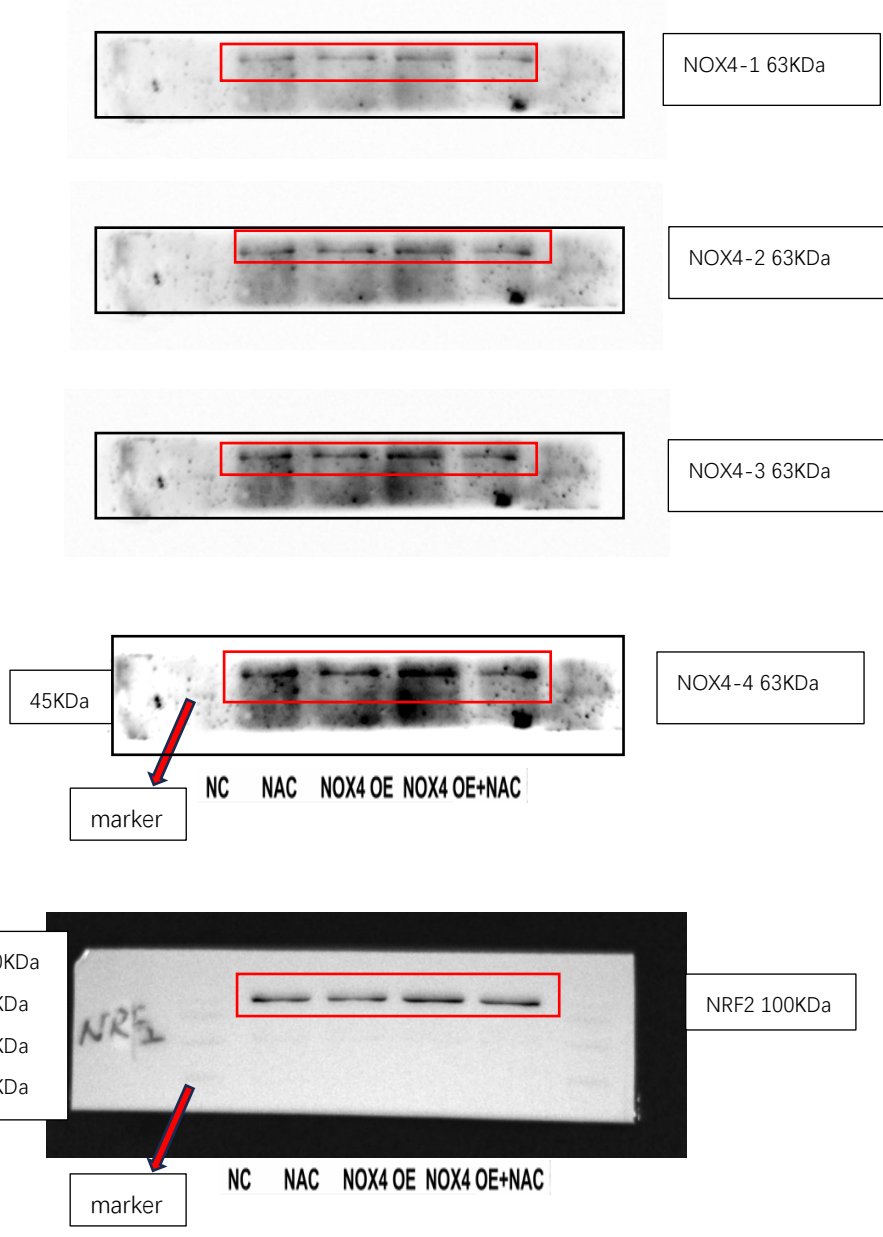
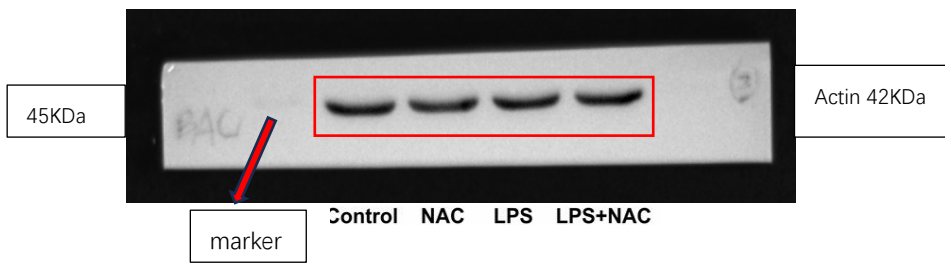
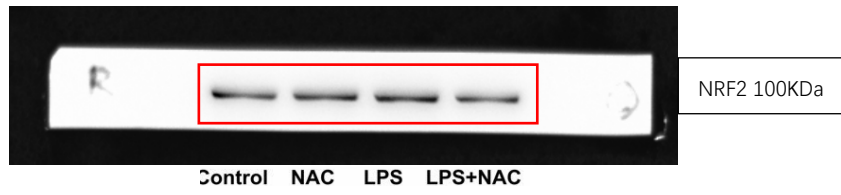
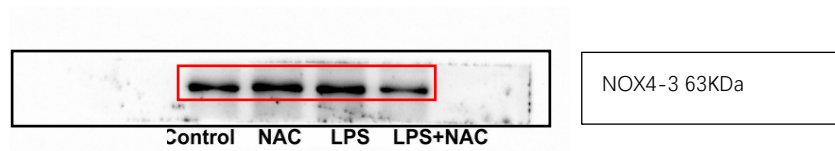
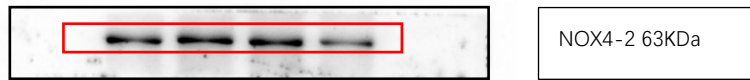
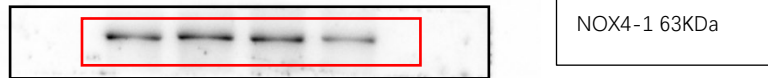


Fig 6H



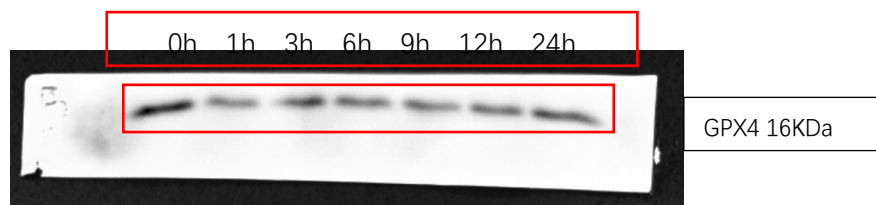


multiple exposure images of NOX4

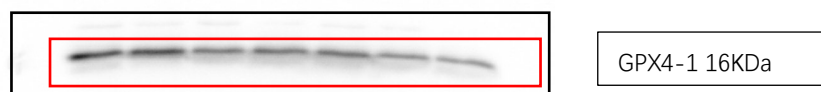
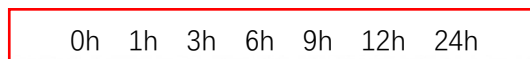


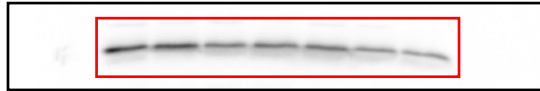
## Replicate blots

Fig 2E

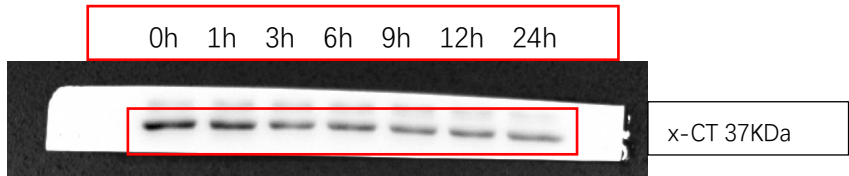
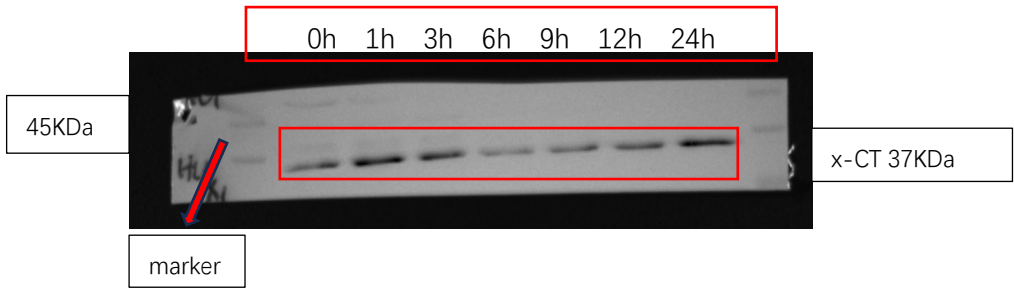
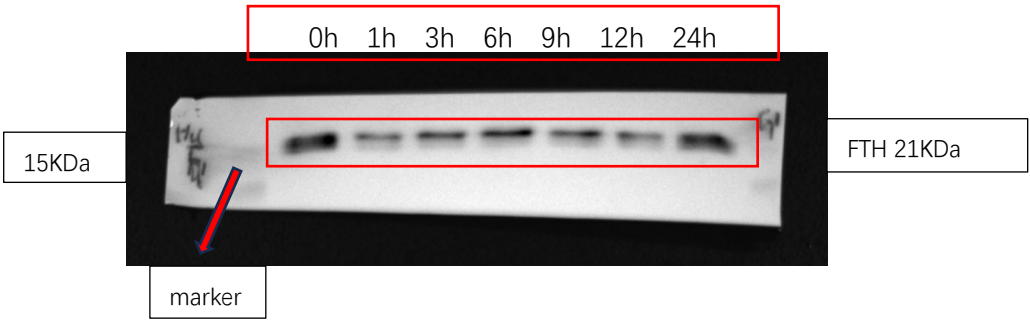
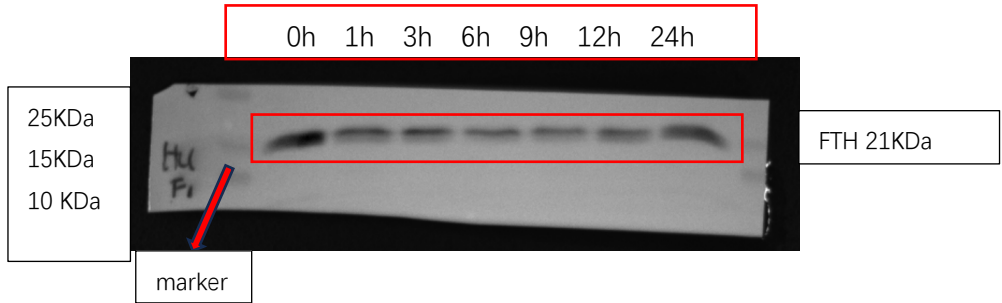


multiple exposure images of GPX4





GPX4-2 16KDa





multiple exposure images of NCOA4

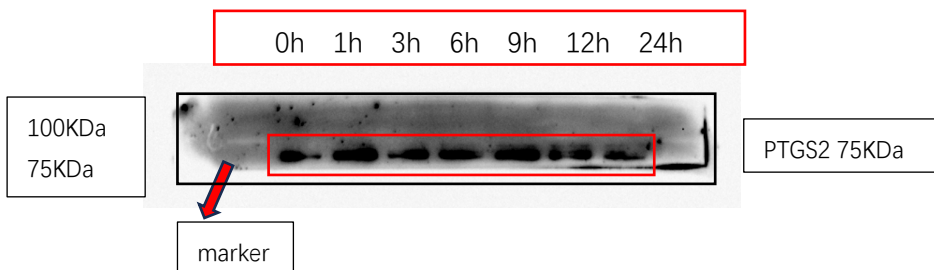
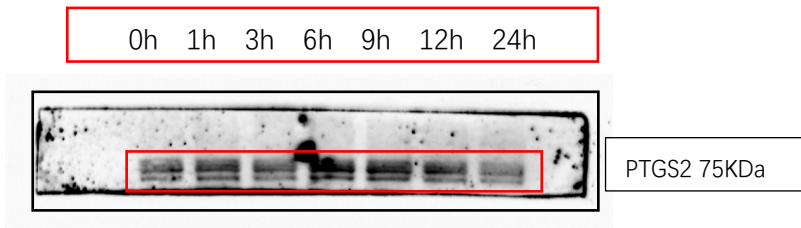
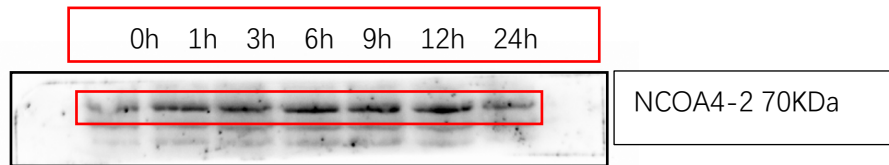
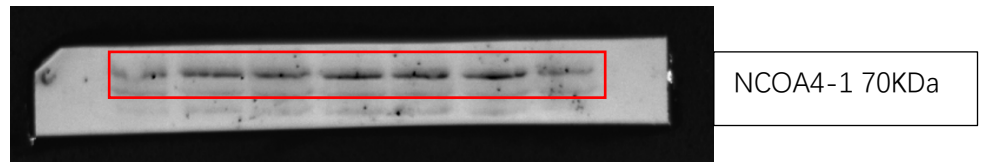
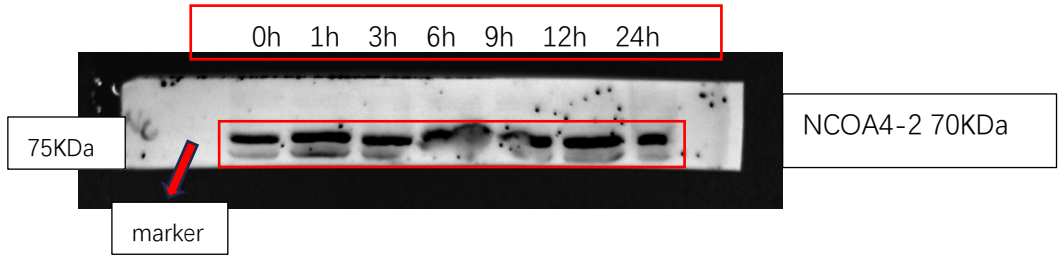
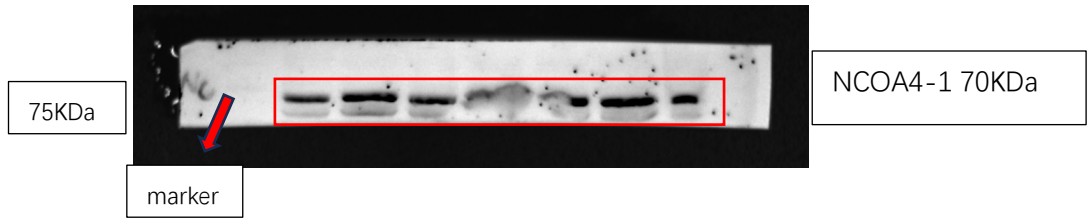
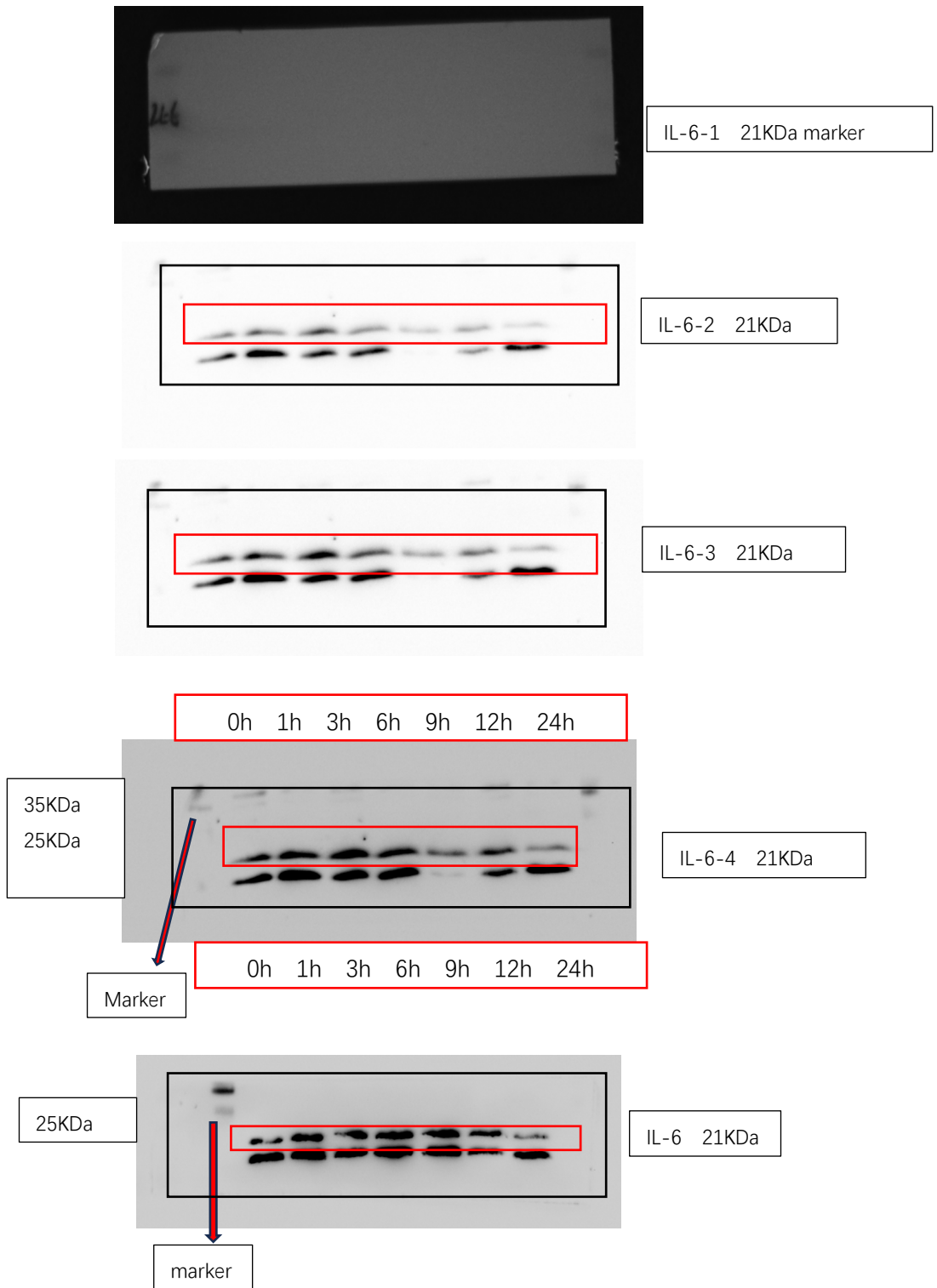


Fig 2B



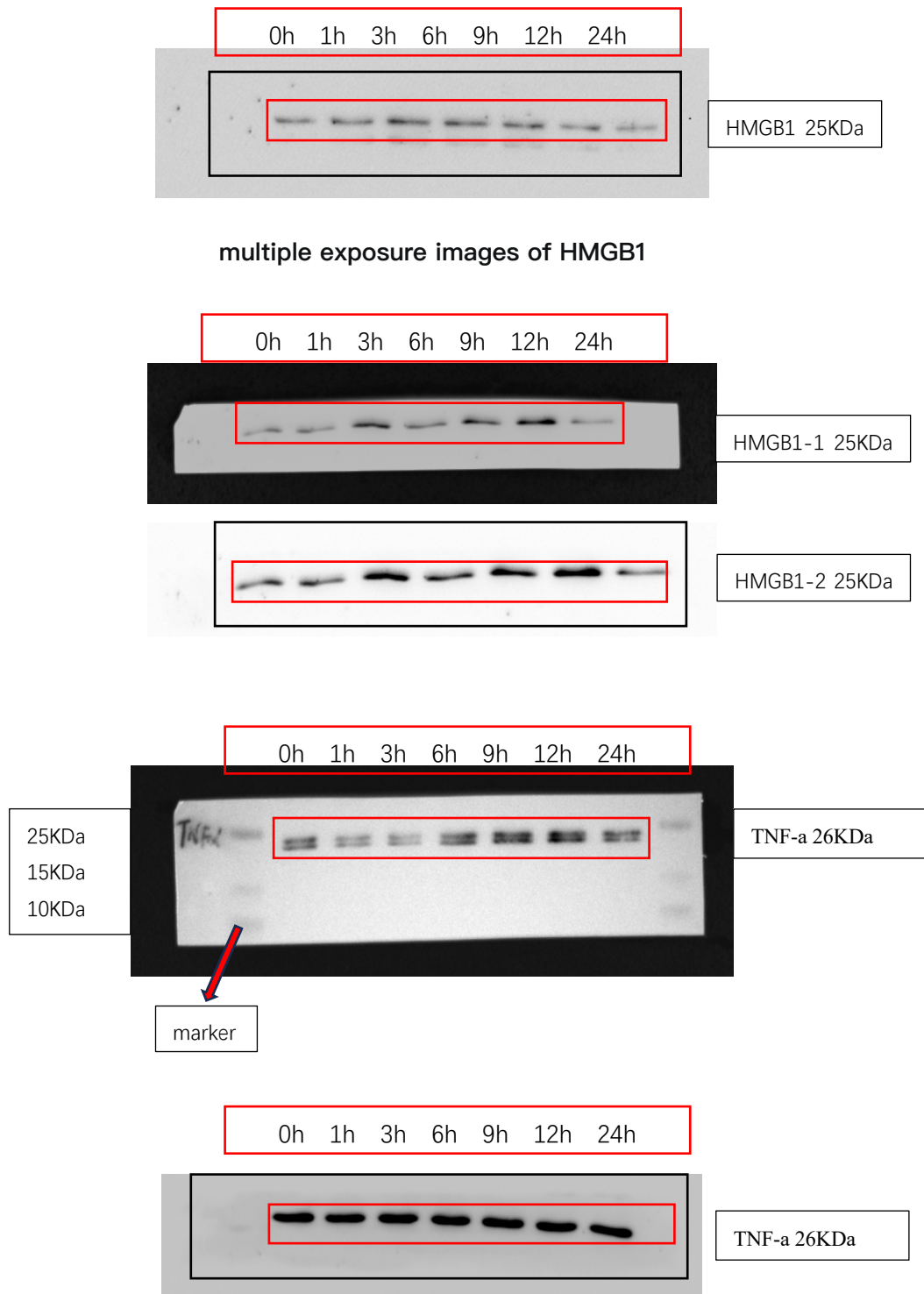
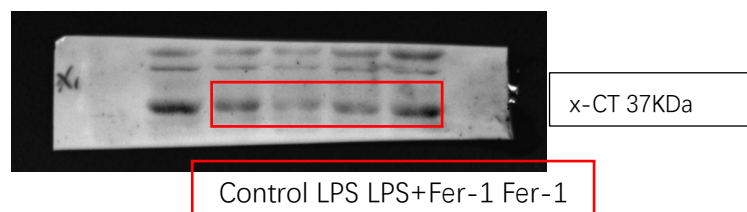
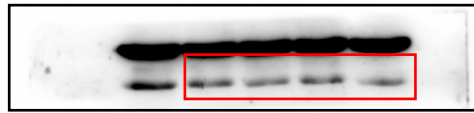


Fig 3E





x-CT 37KDa

Control LPS LPS+Fer-1 Fer-1

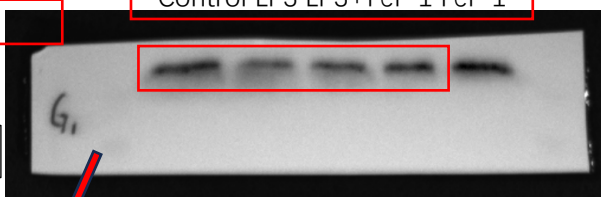


GPX4 16KDa

10KDa

marker

Control LPS LPS+Fer-1 Fer-1

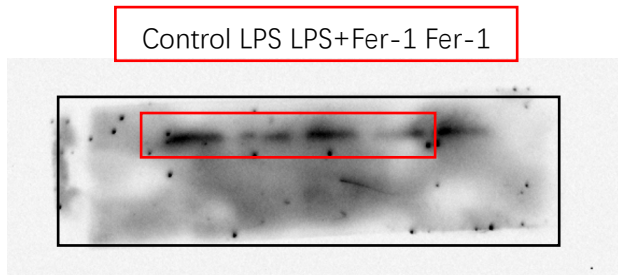


GPX4 16KDa

10KDa

marker

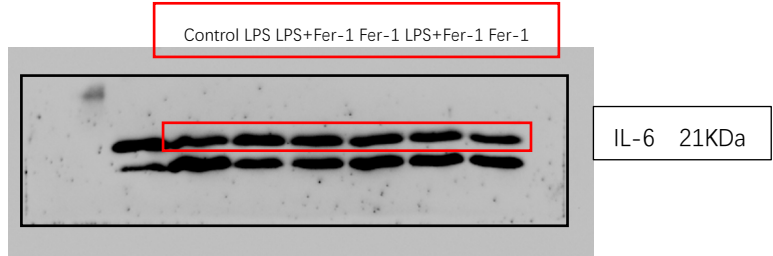
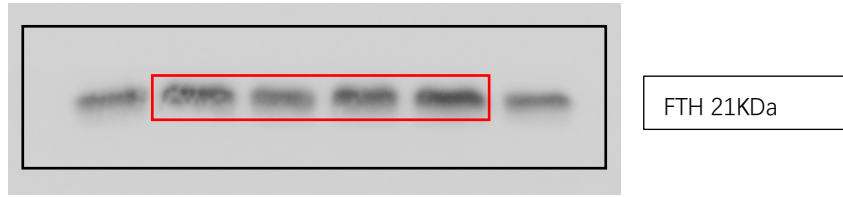
Control LPS LPS+Fer-1 Fer-1



FTH 21KDa

Control LPS LPS+Fer-1 Fer-1

Control LPS LPS+Fer-1 Fer-1



multiple exposure images of HMGB

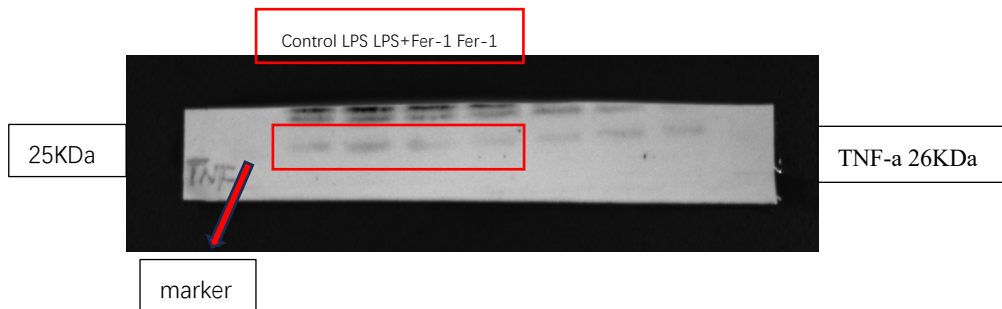
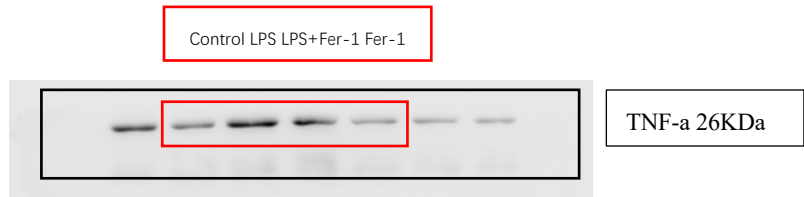
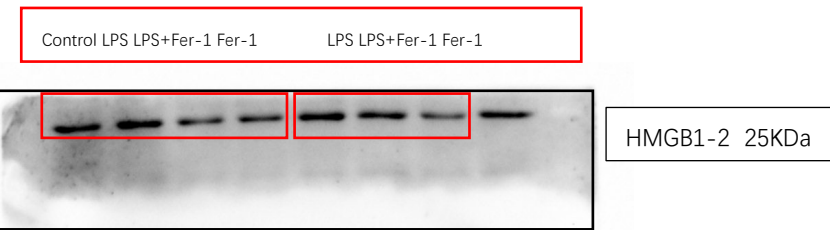
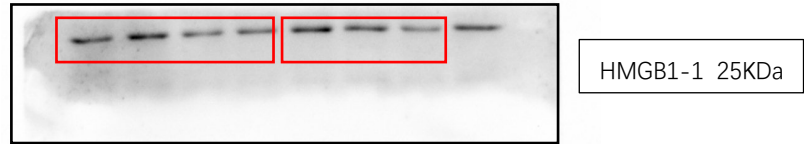
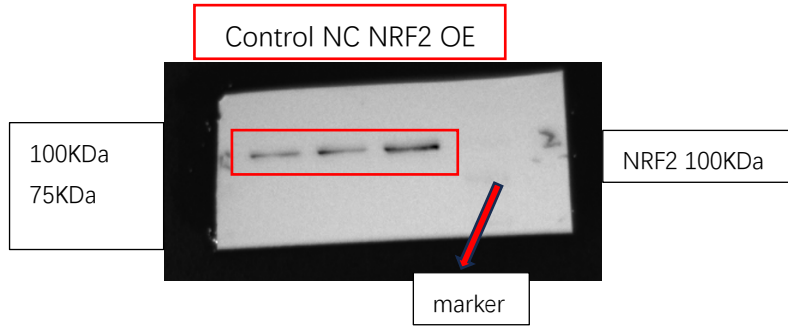


Fig 4B



multiple exposure images of NRF2

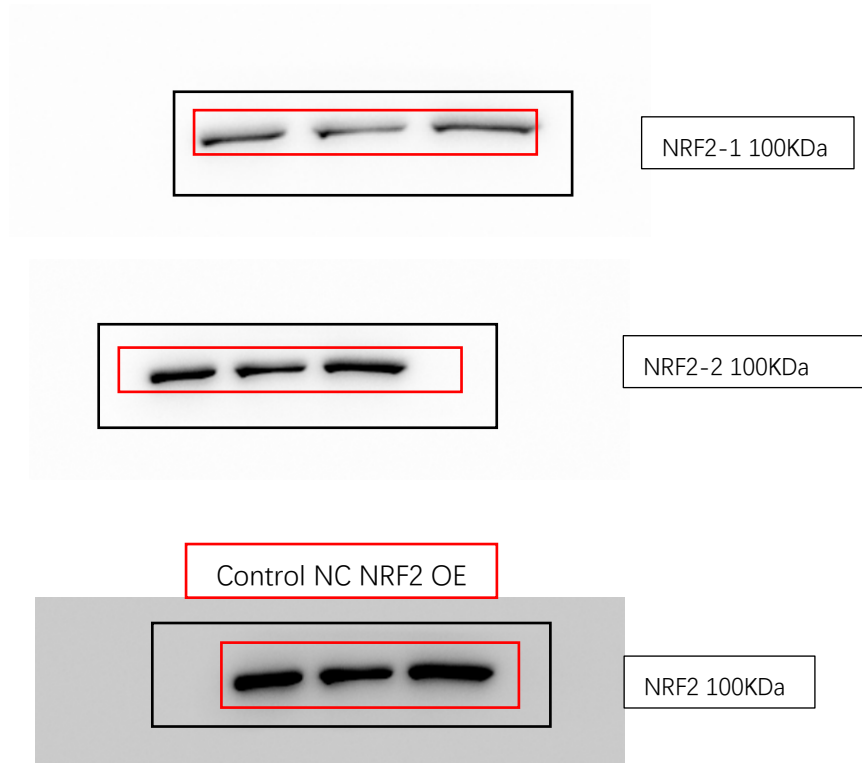
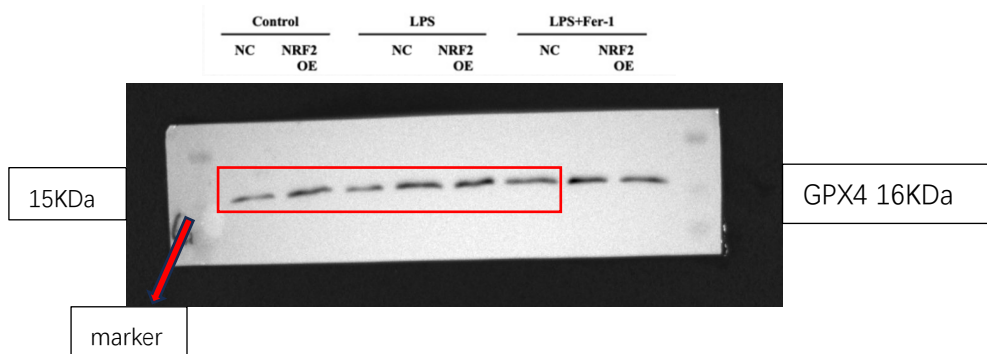
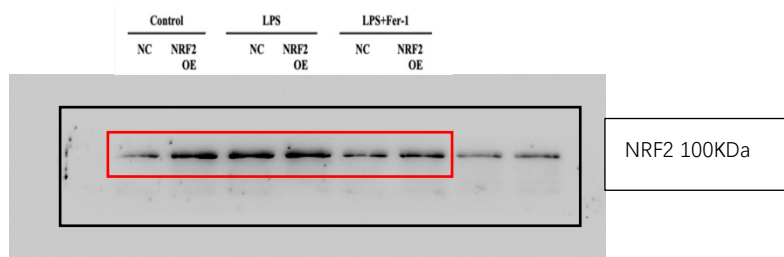
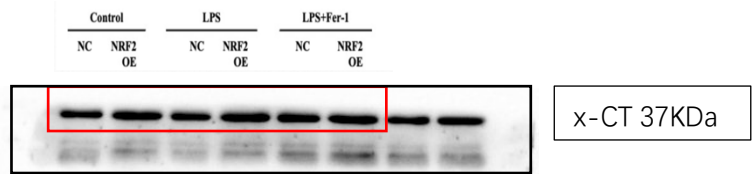
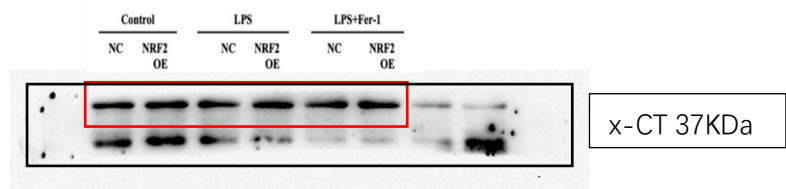
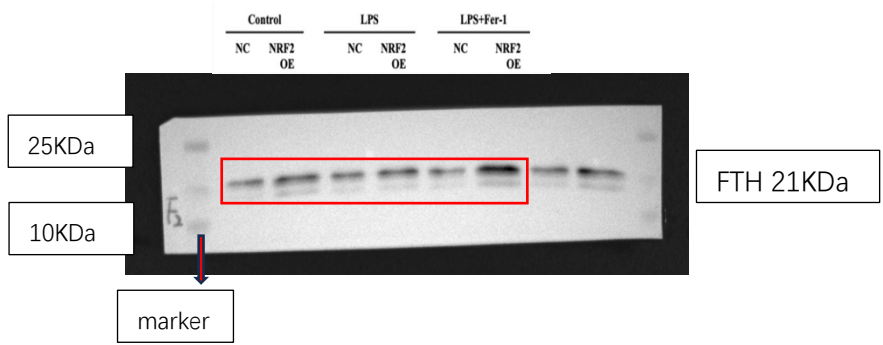
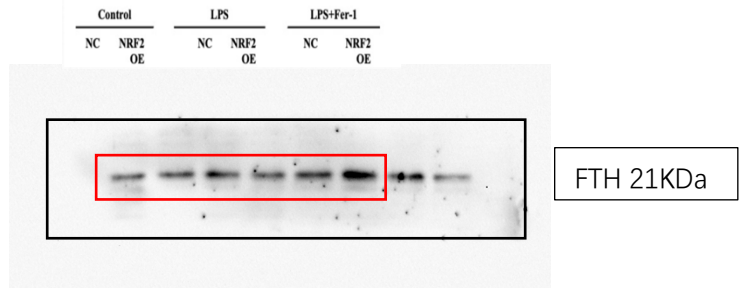
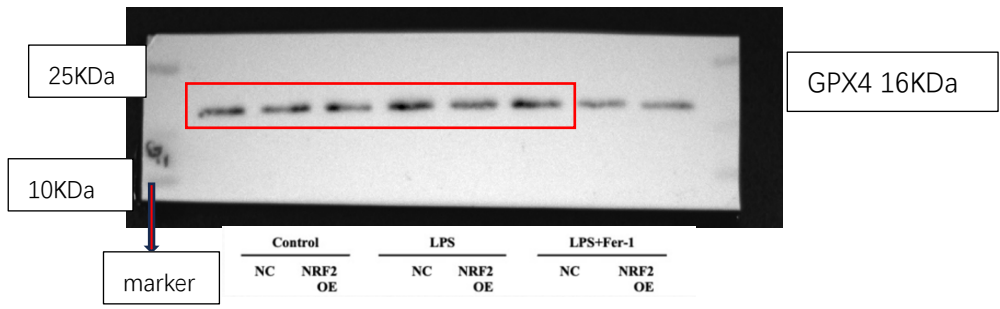
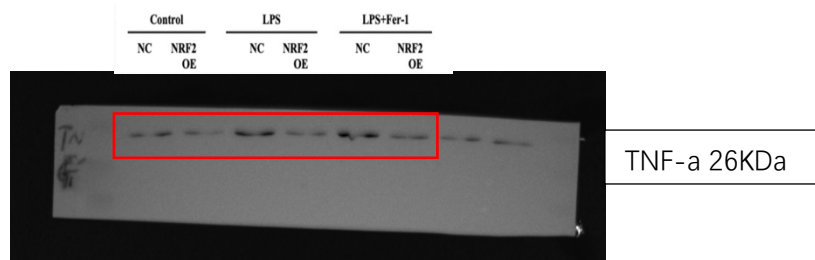
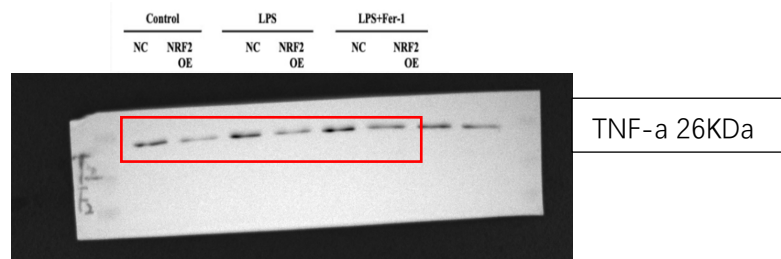
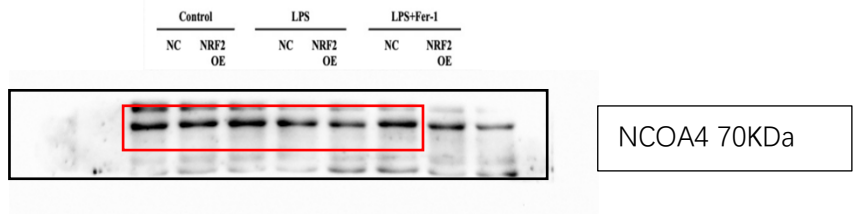
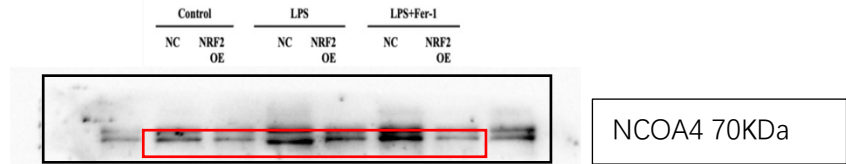
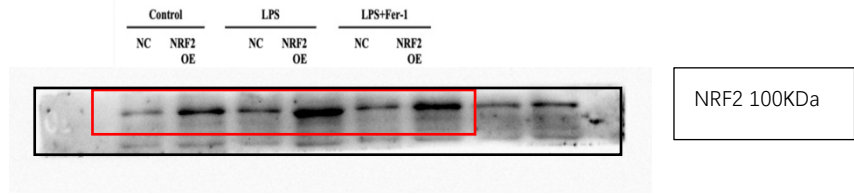


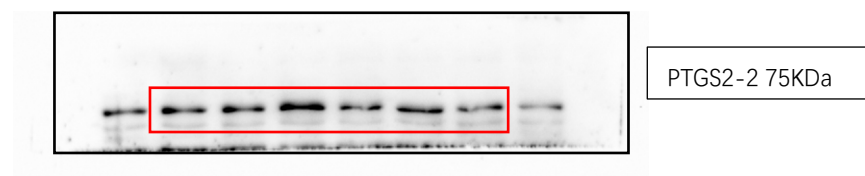
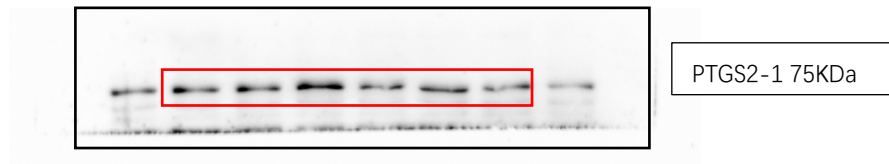
Fig 4F



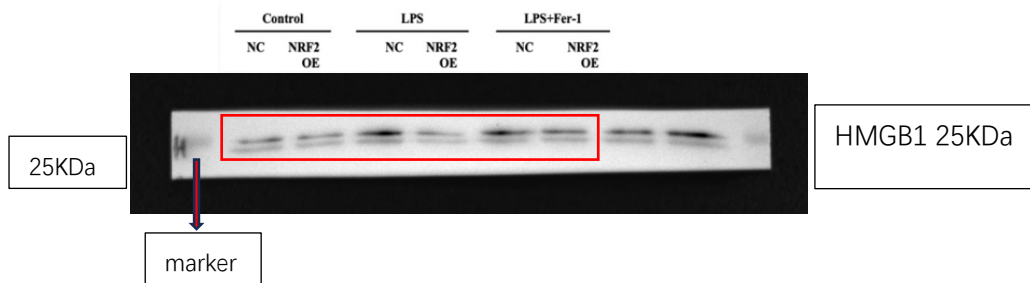
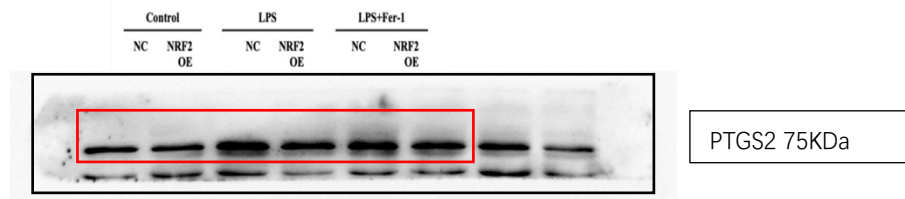
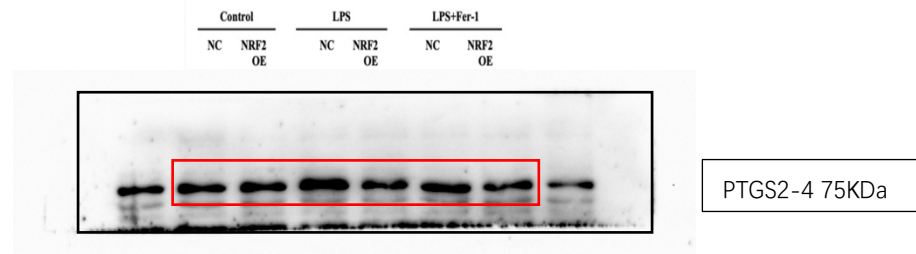
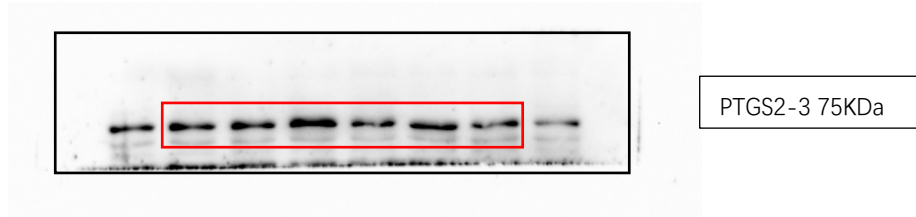




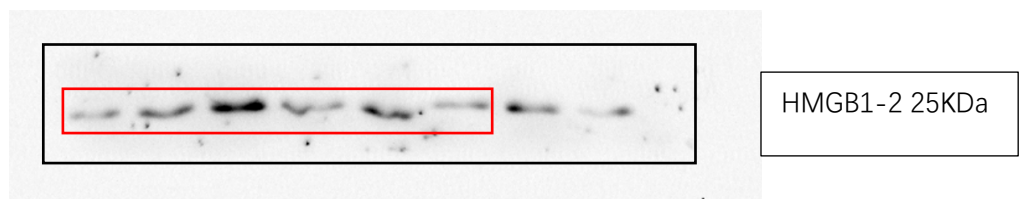
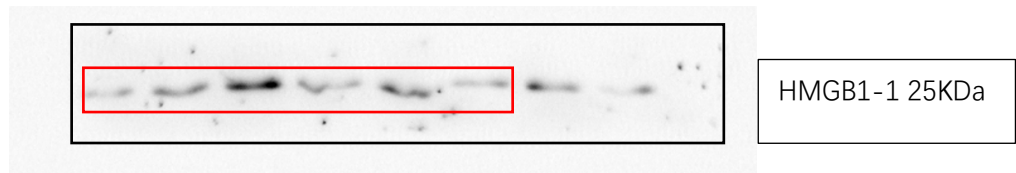
multiple exposure images of PTGS2

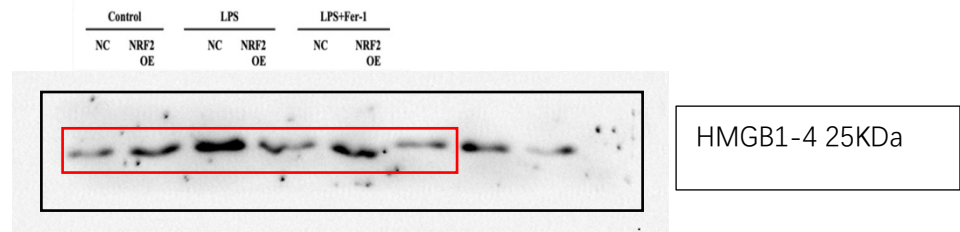
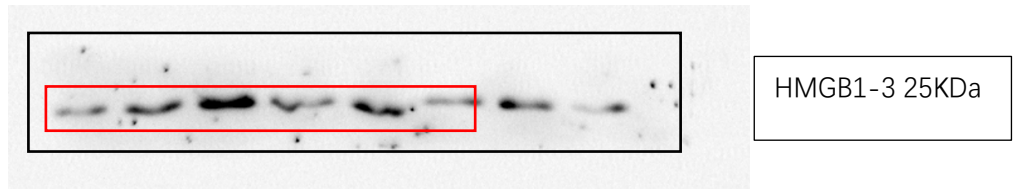






multiple exposure images of HMGB1





multiple exposure images of HMGB1

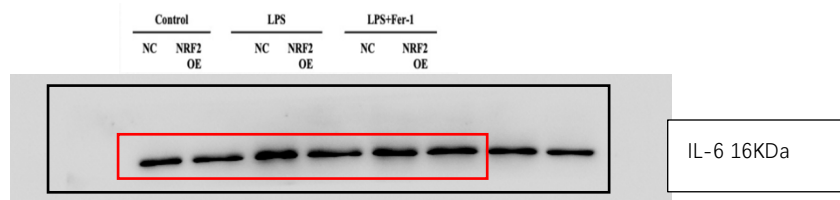
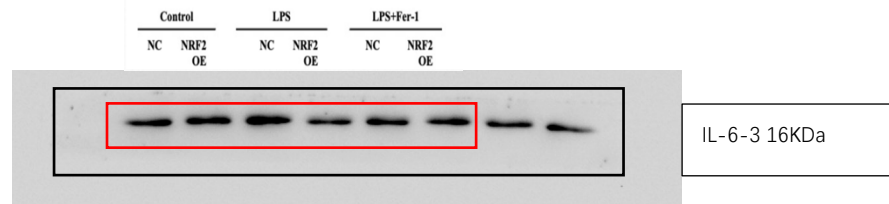
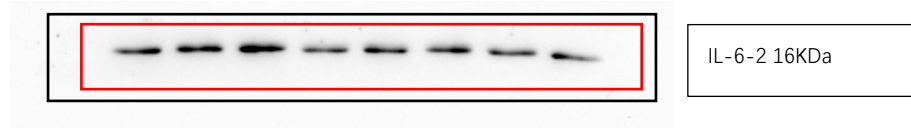
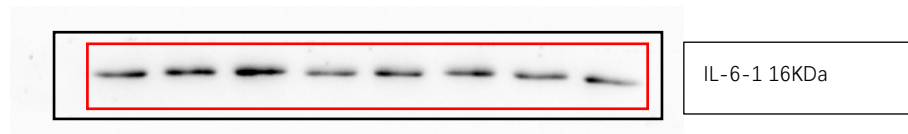
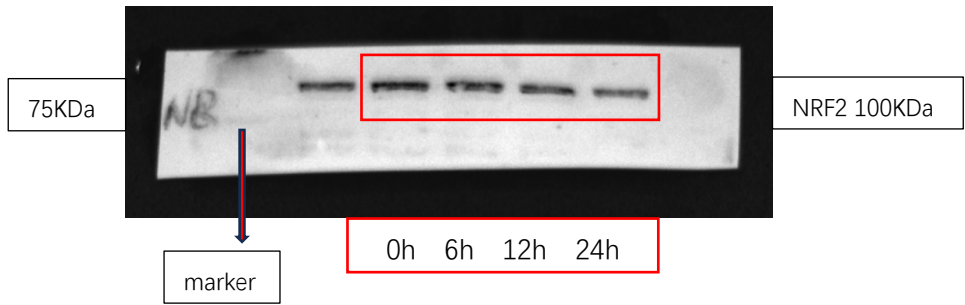
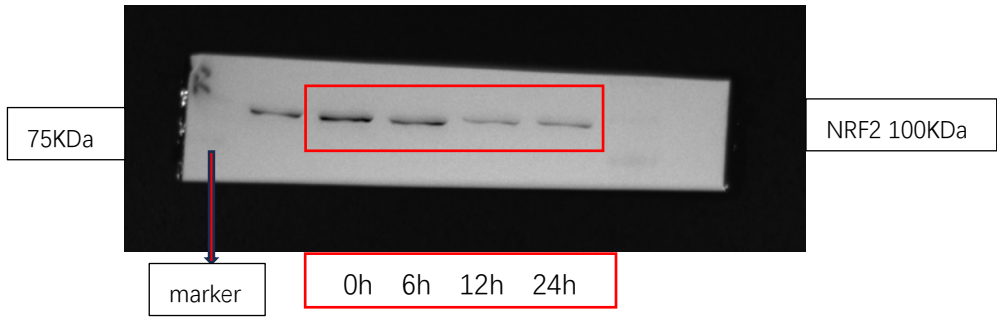
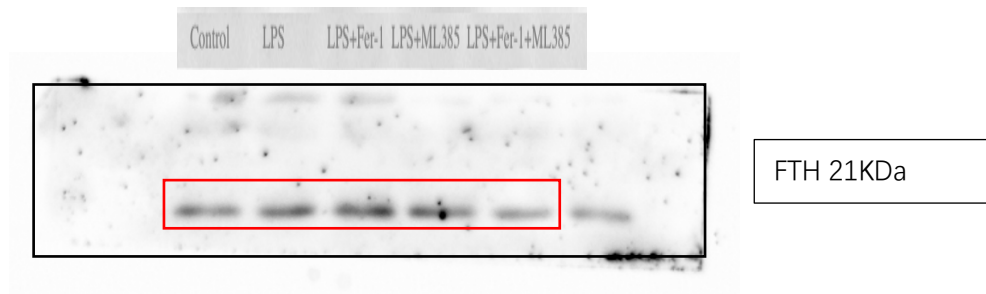
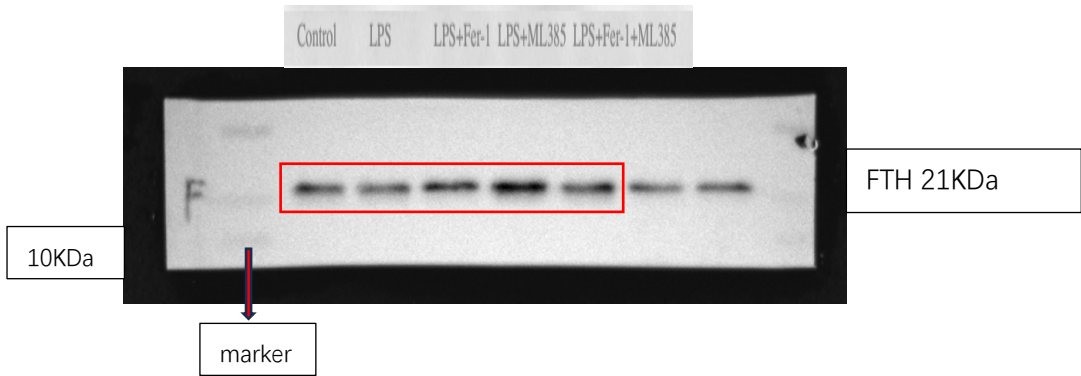


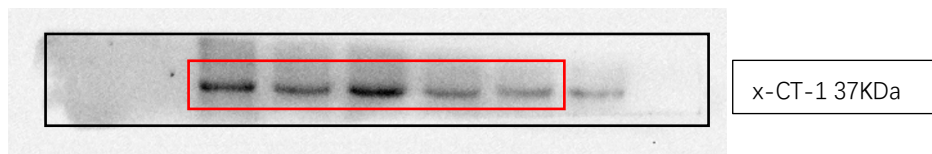
Fig 5A

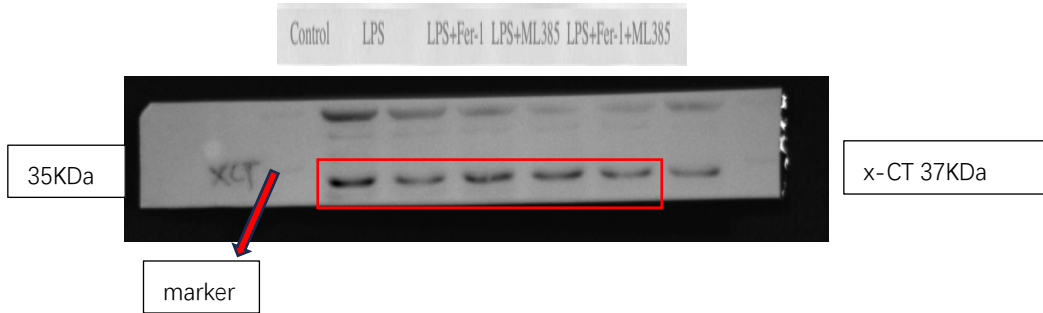
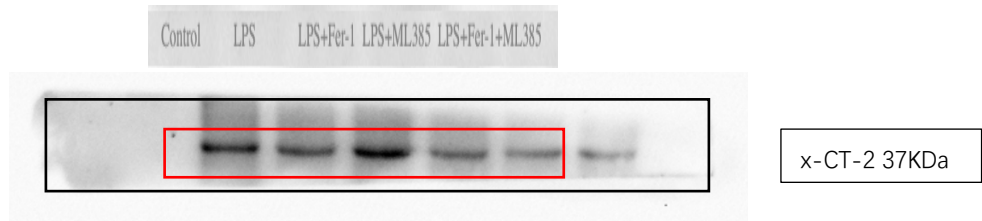


**Fig 5E**

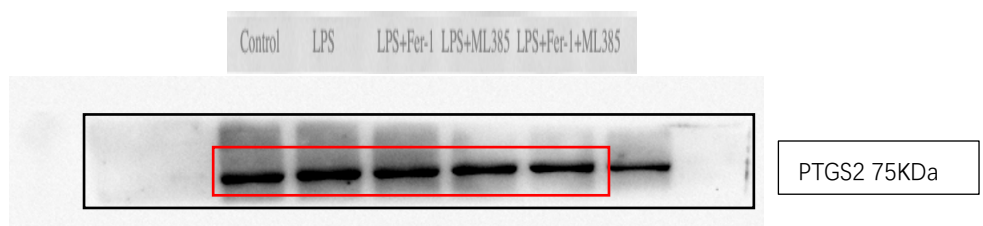
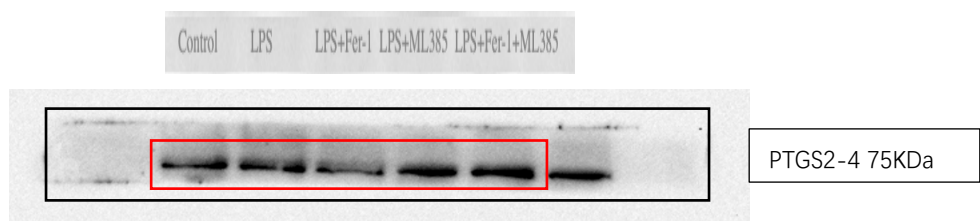
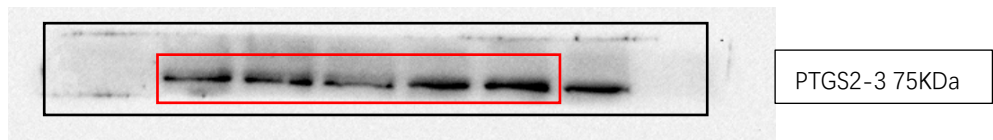
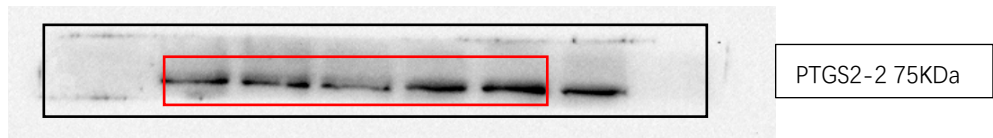
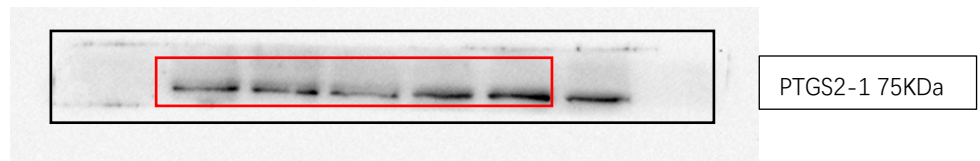


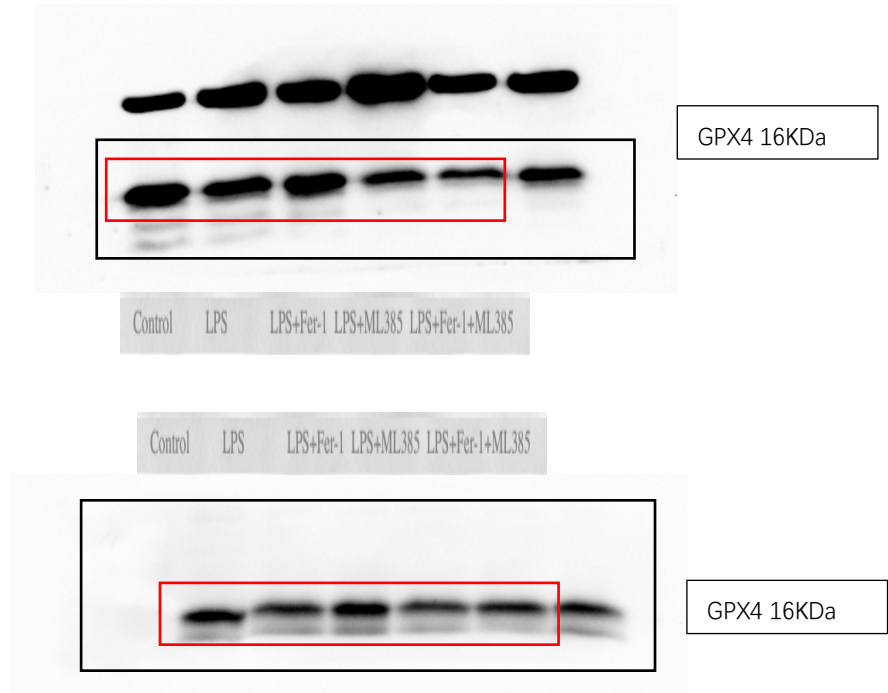
multiple exposure images of x-CT



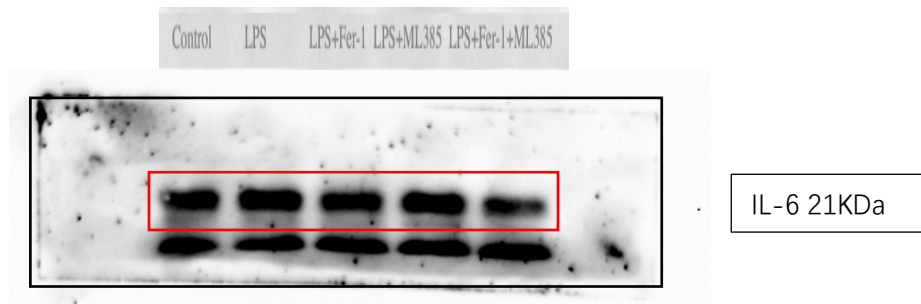


multiple exposure images of PTGS2





**Fig 5F**



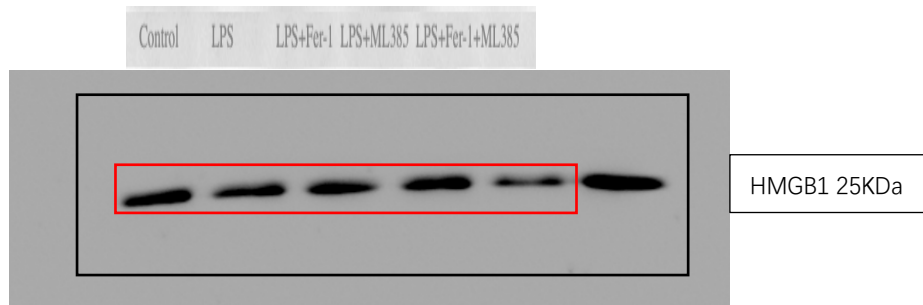
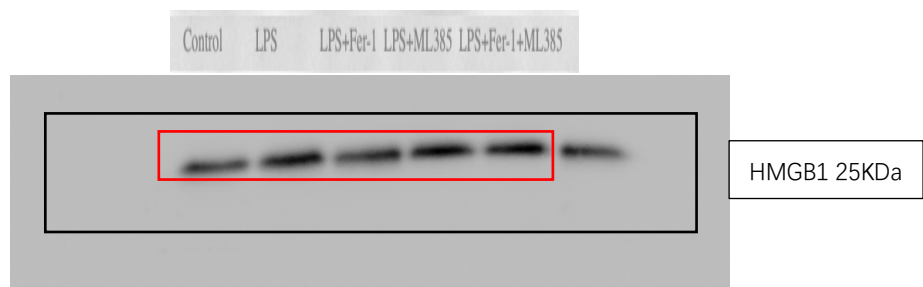
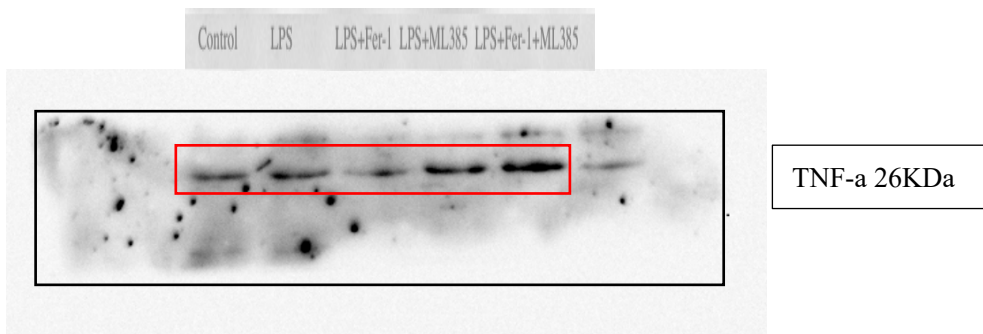
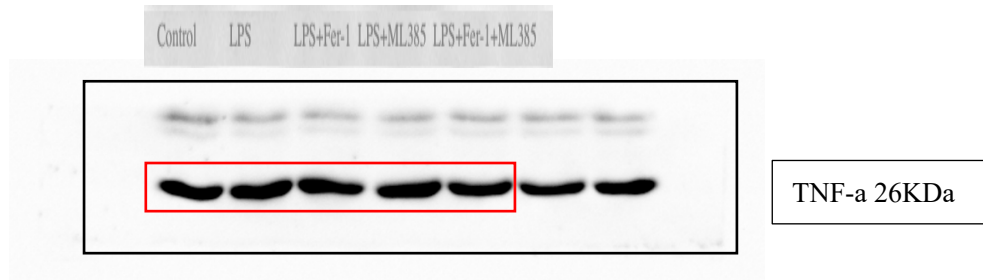
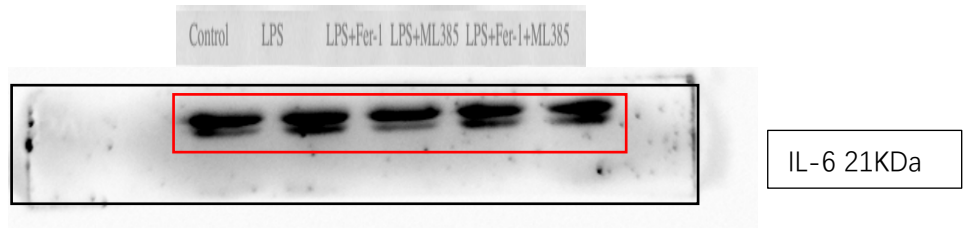
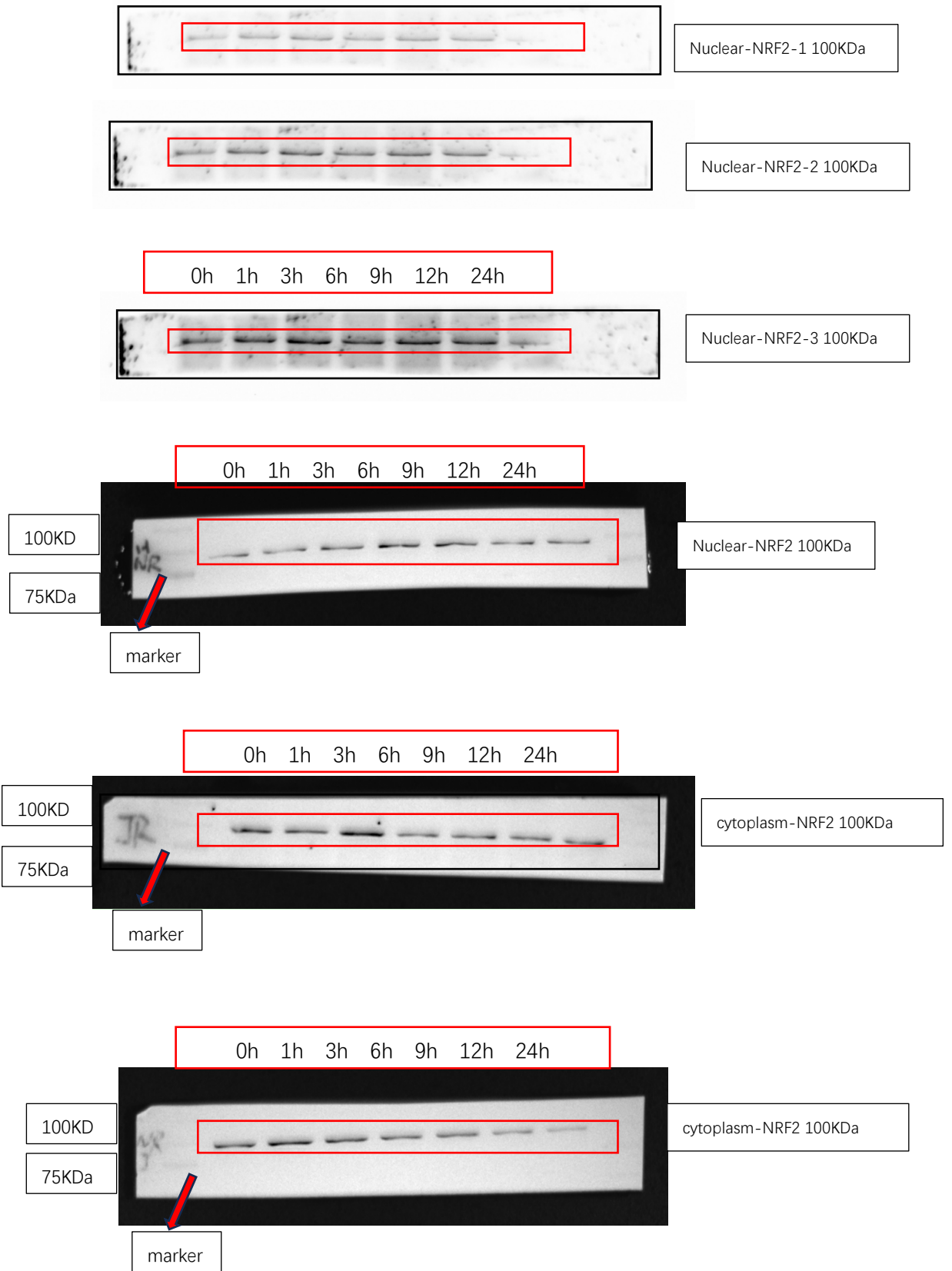


Fig 6A

multiple exposure images of PTGS2





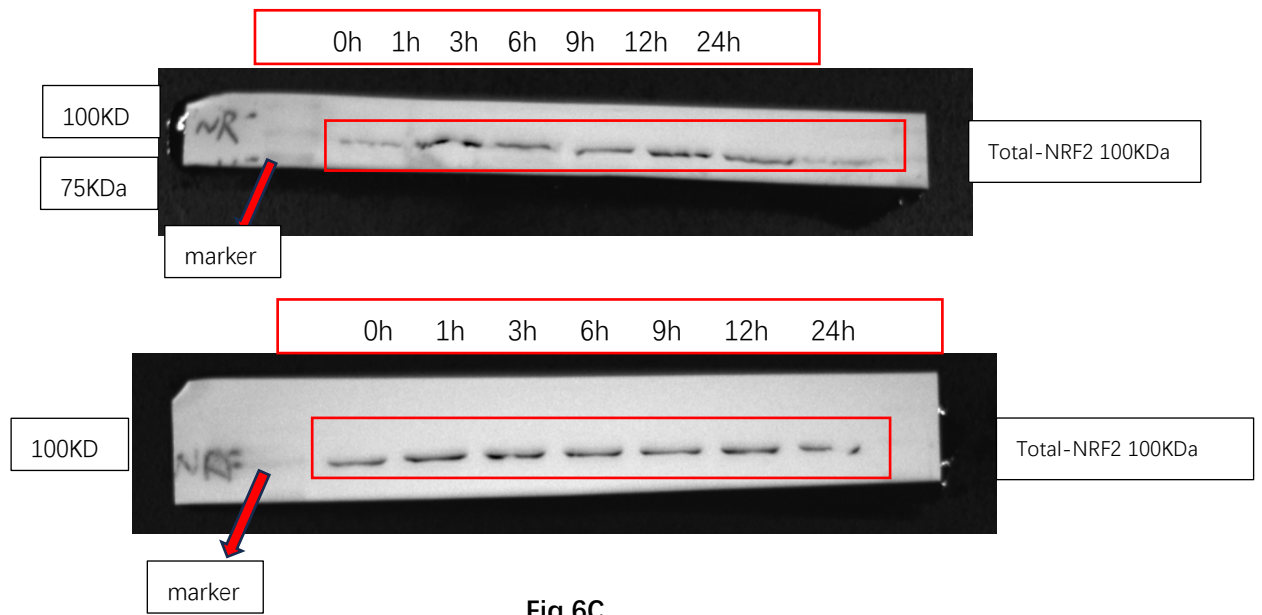


Fig 6C

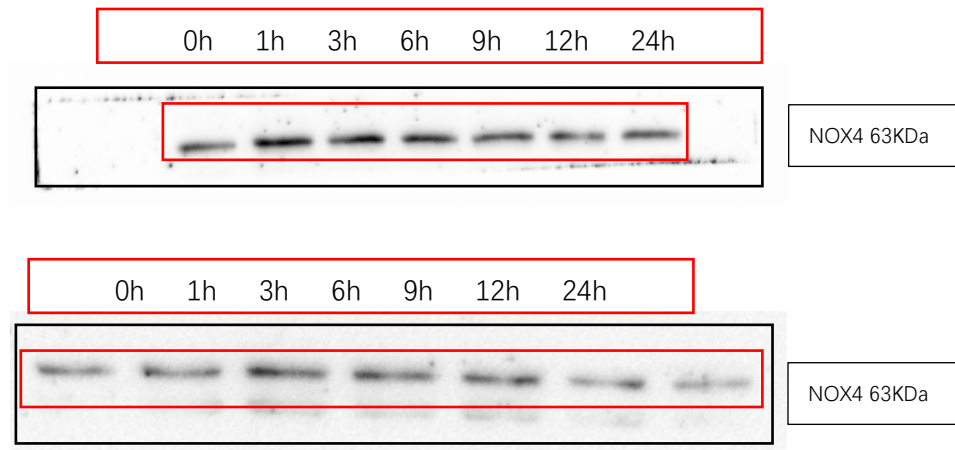
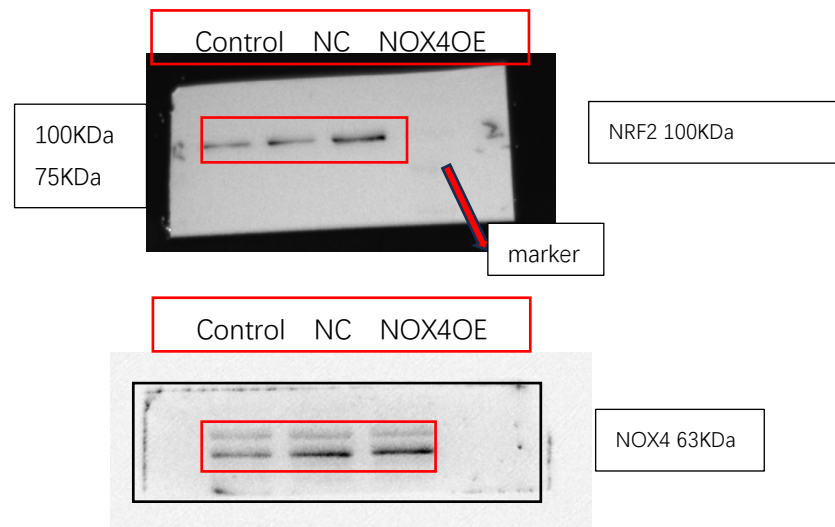
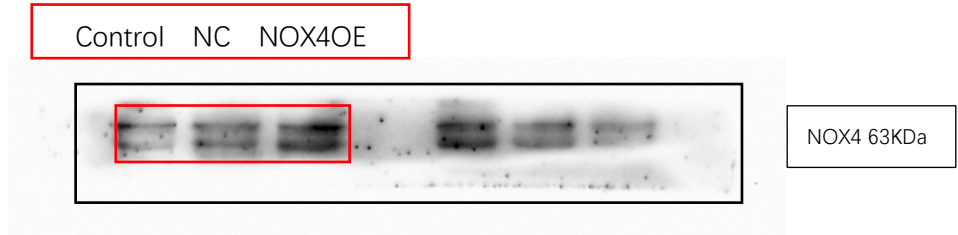
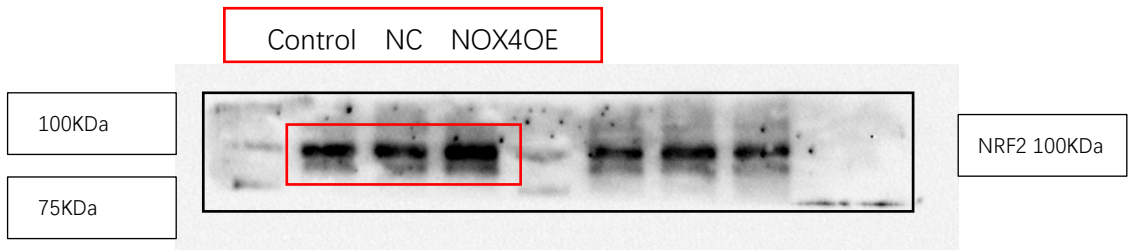


Fig 6E

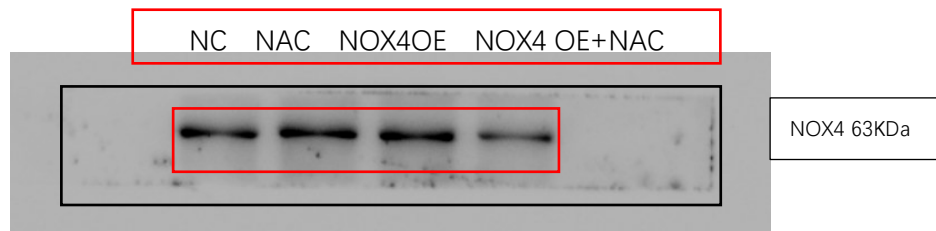
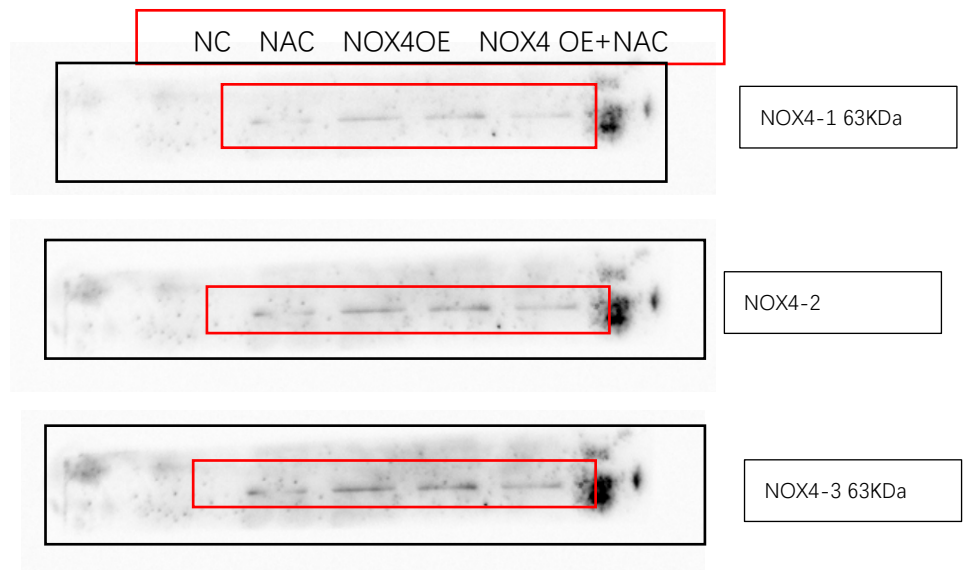






**Fig 6G**

**multiple exposure images of NOX4**



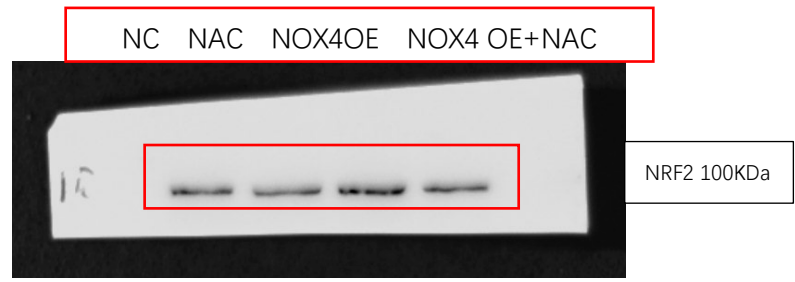
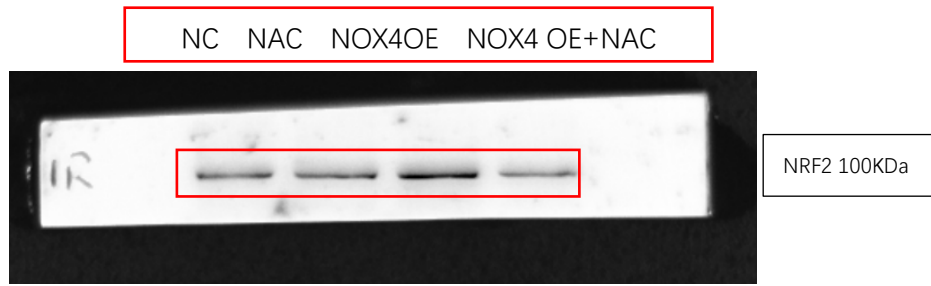
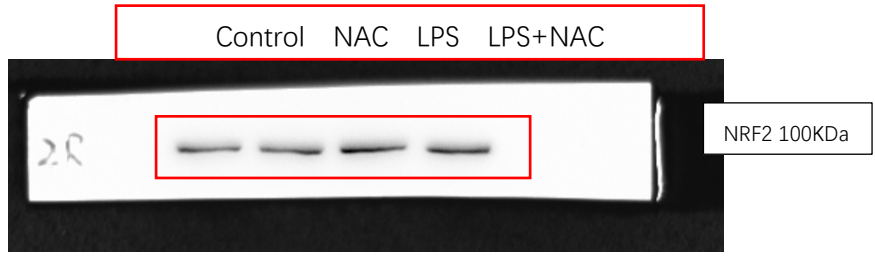
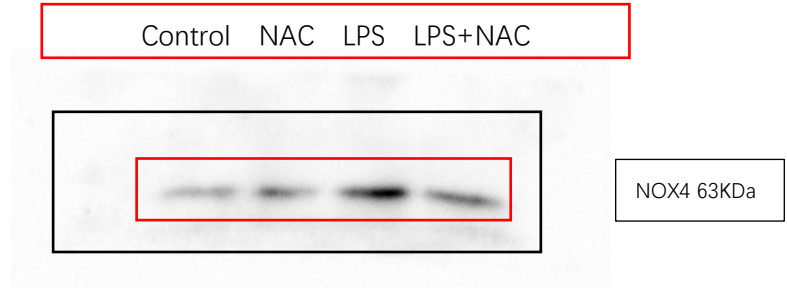
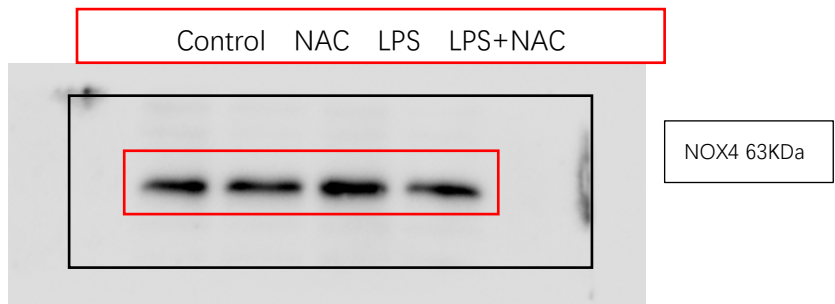
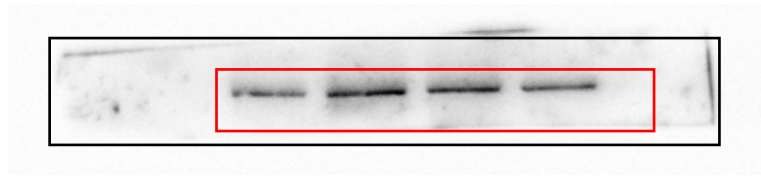


Fig 6H



Control NAC LPS LPS+NAC



NRF2 100KDa