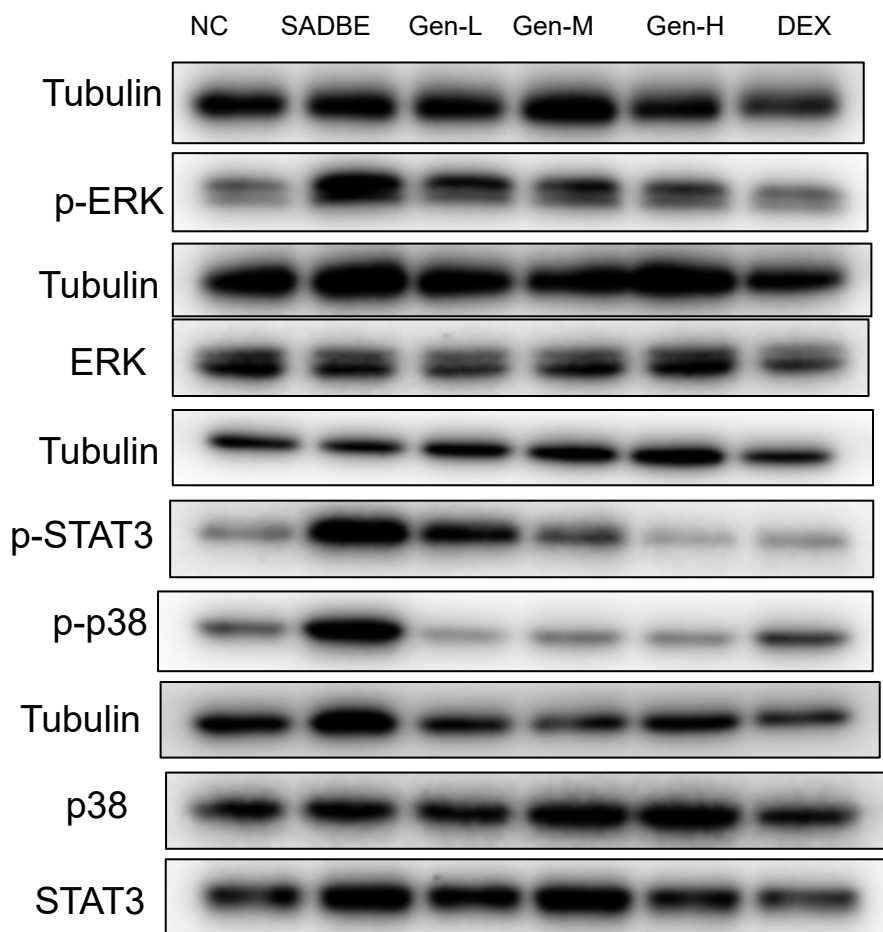
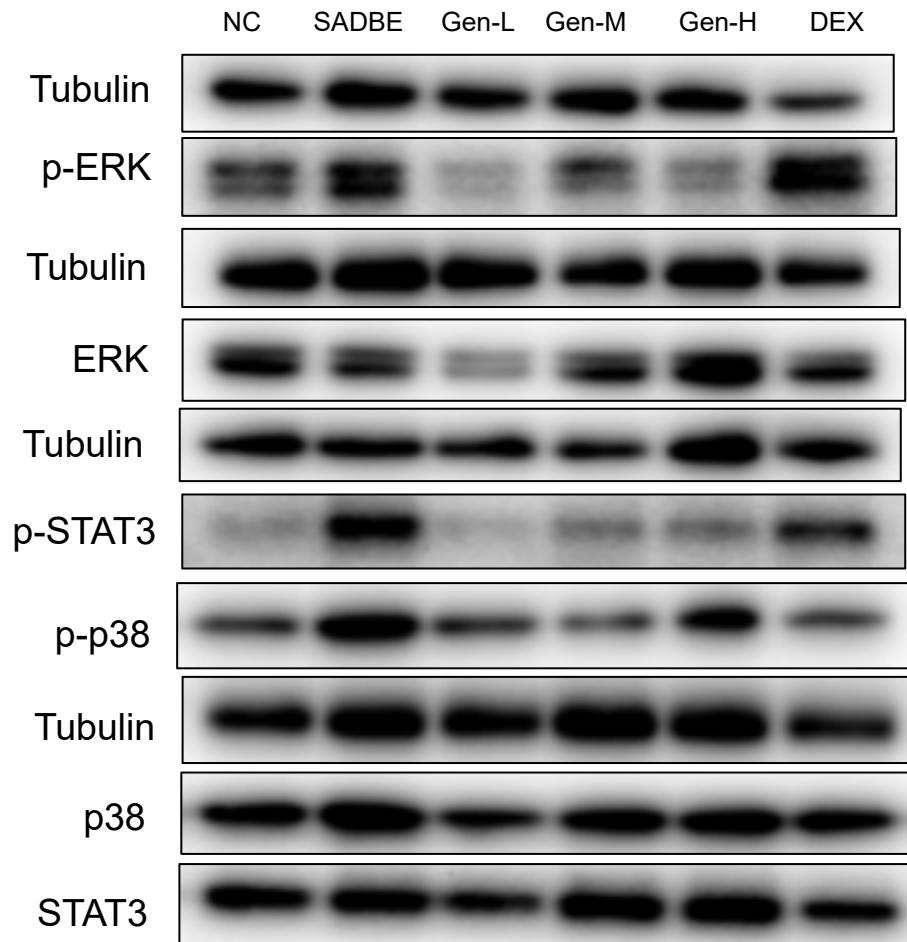


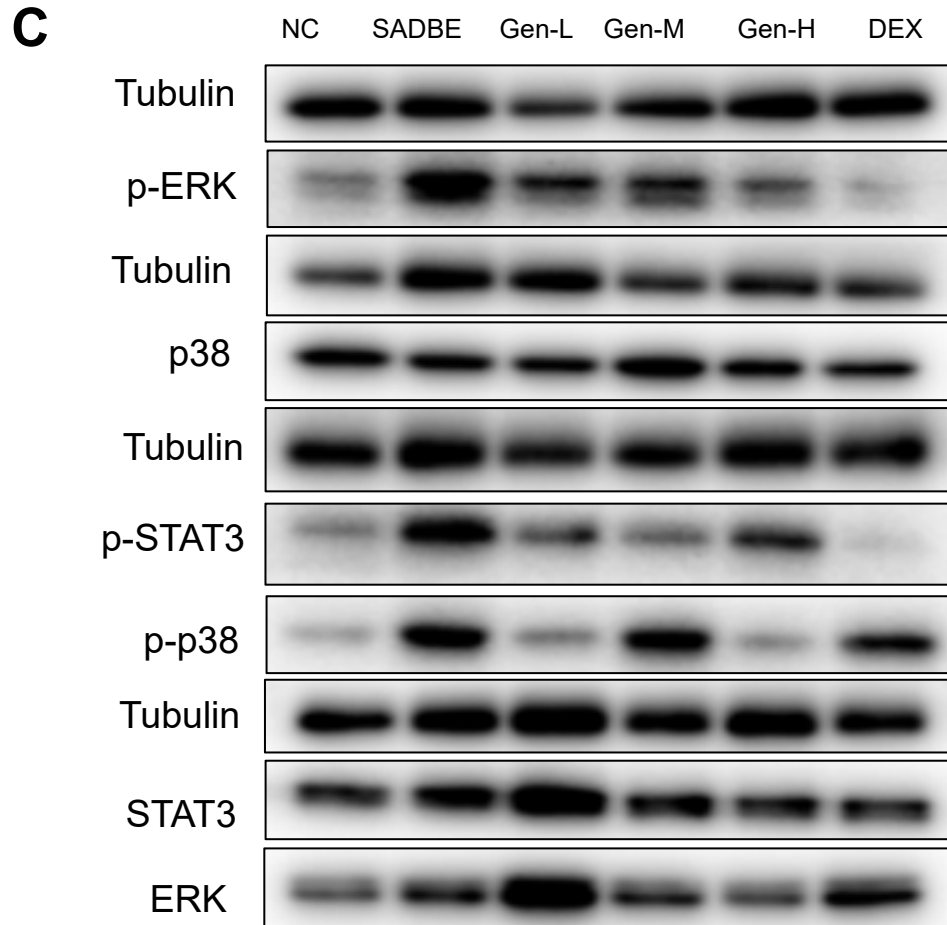
## Supplementary data1 The data of the original western blots images

### A



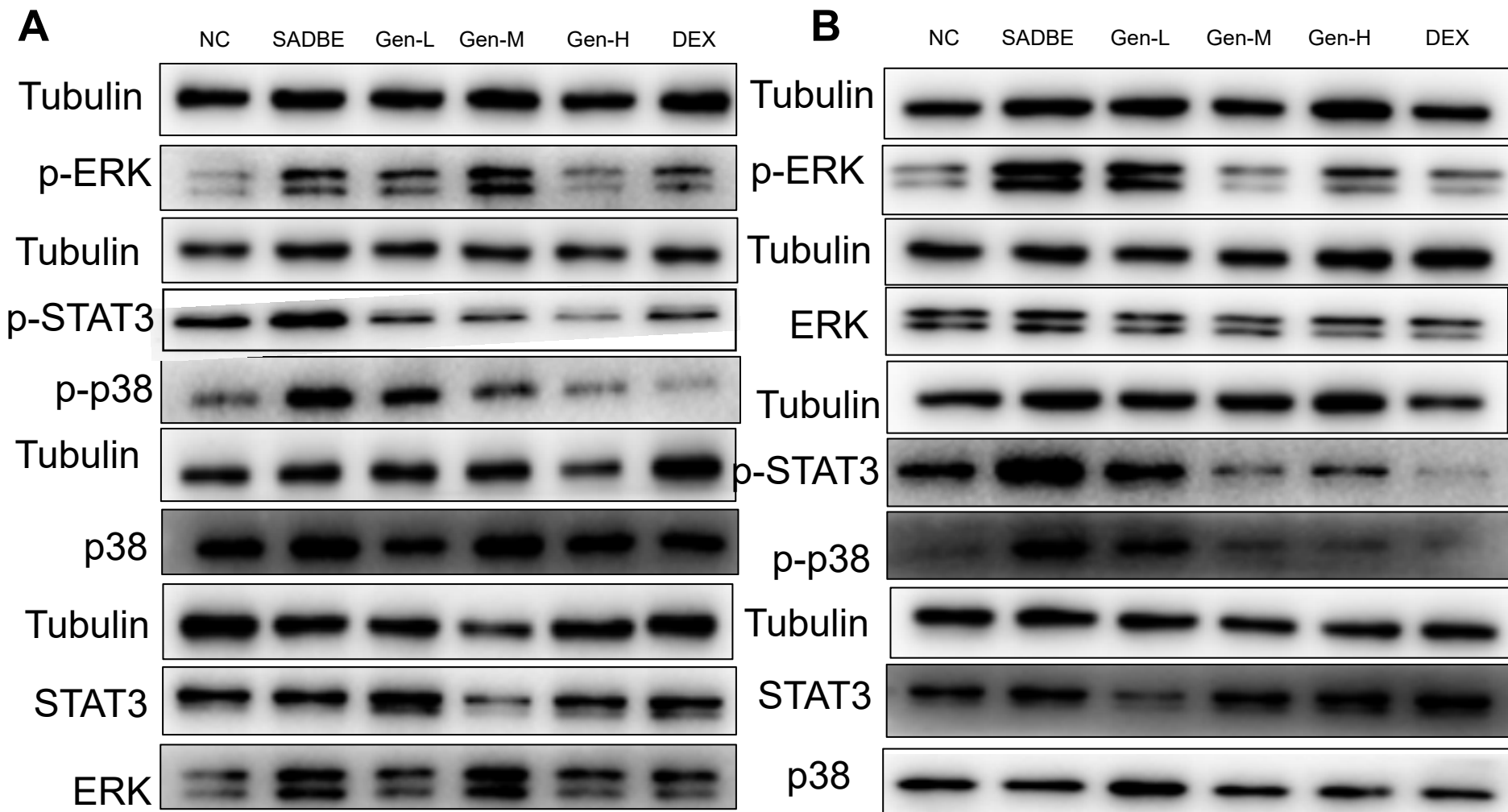
### B

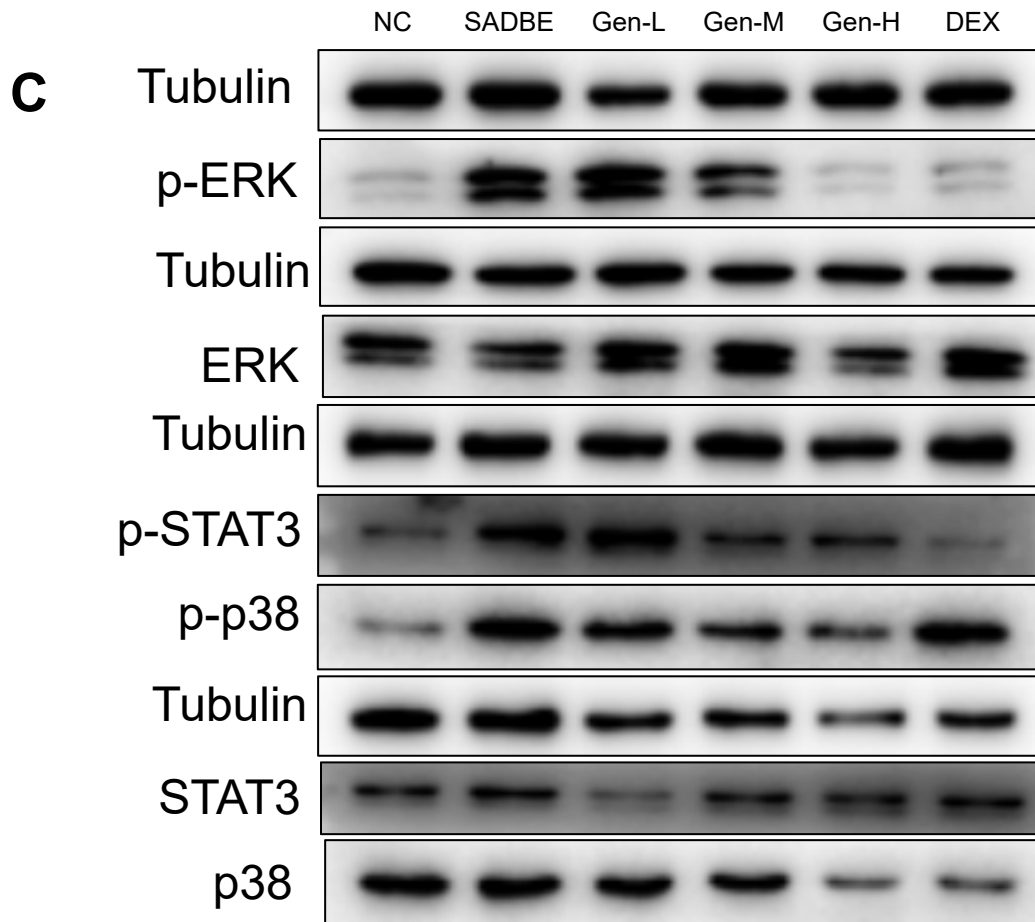




**Fig. S1** The original western blot images of **Fig.5A** in the manuscript.(A,B,C)

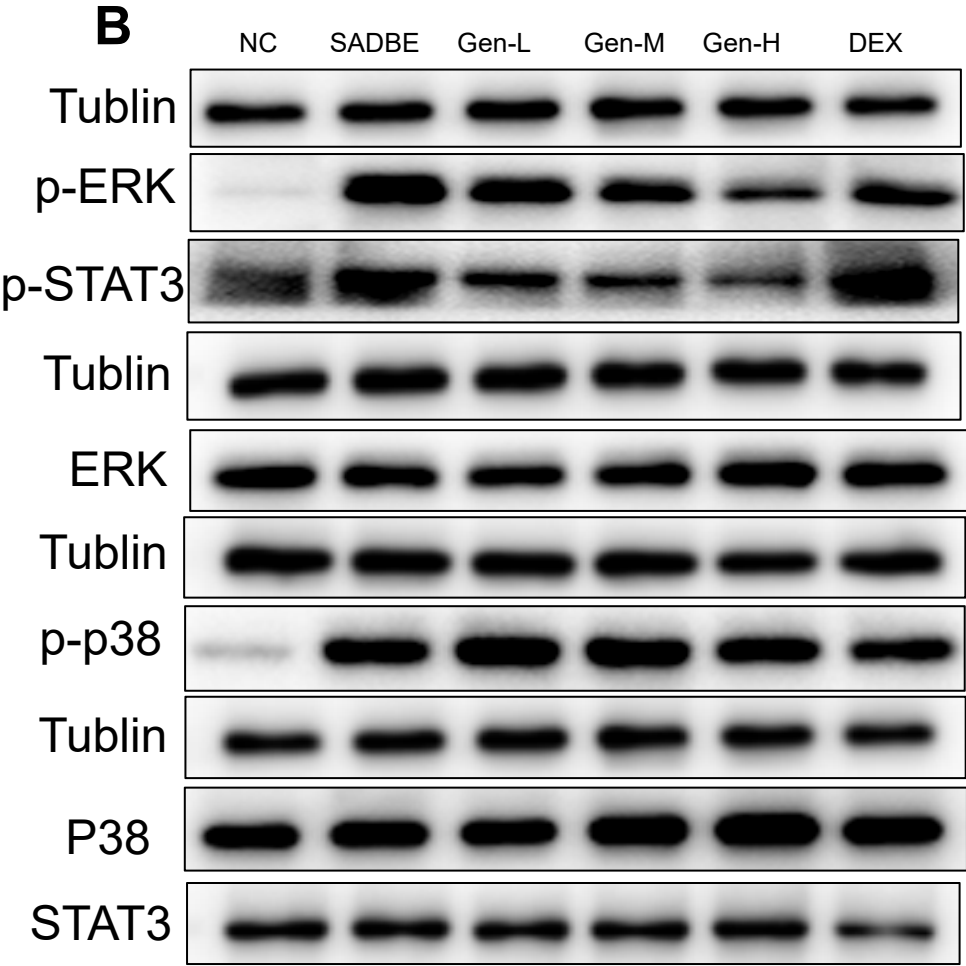
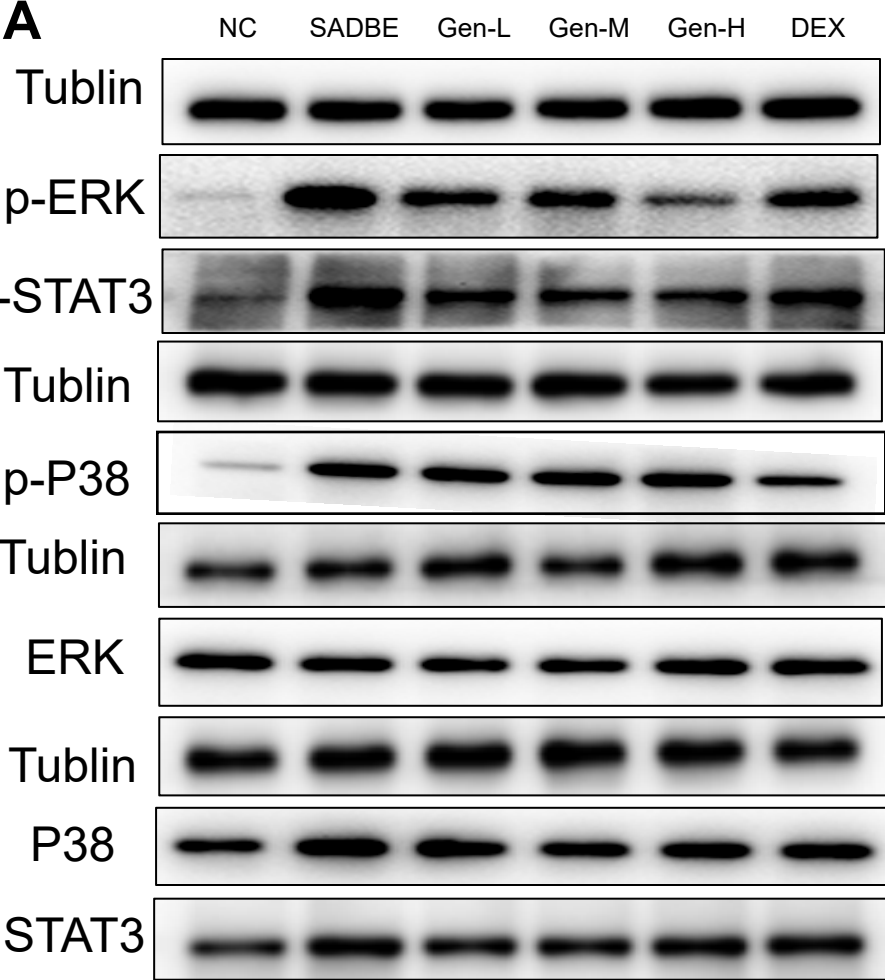
## Supplementary data2 The data of the original western blots images

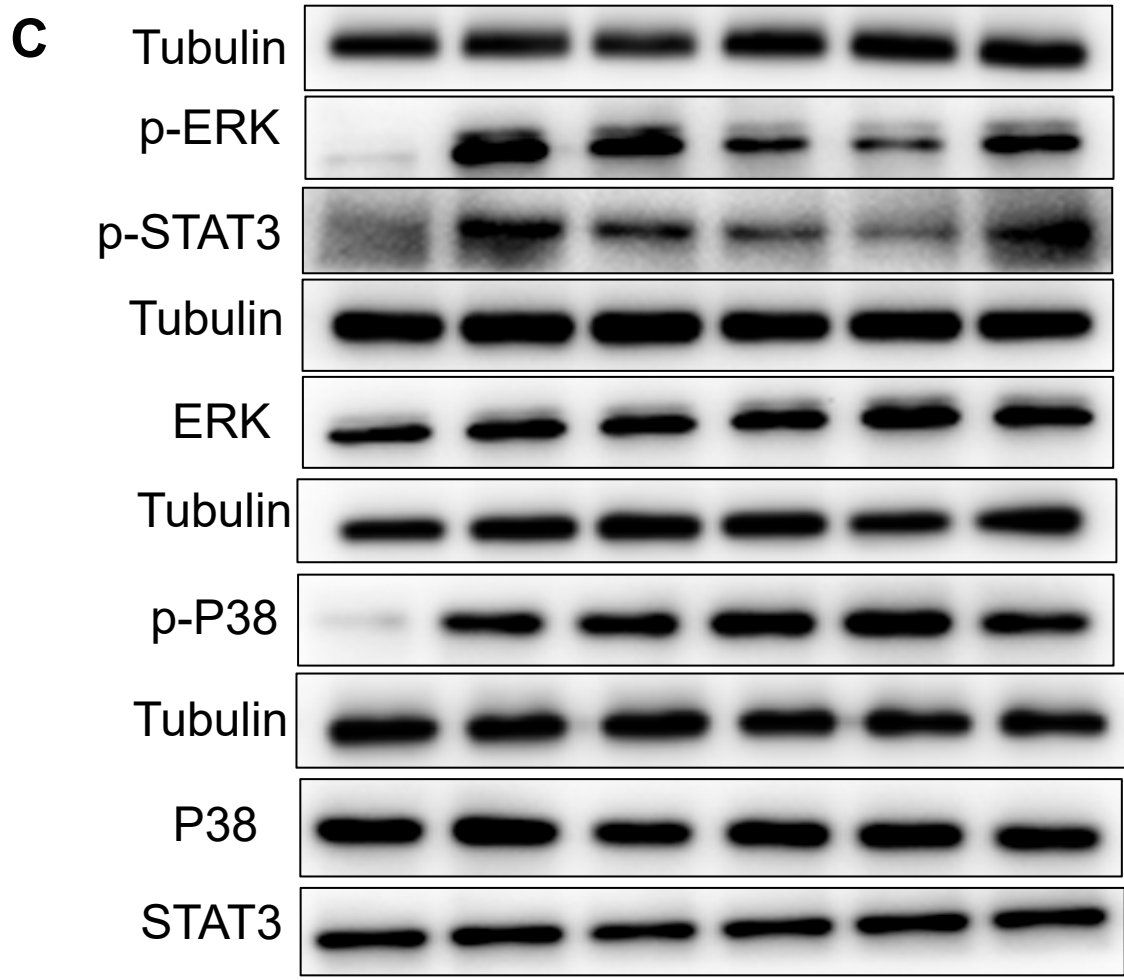




**Fig. S2** The original western blot images of **Fig.6A** in the manuscript.(A,B,C)

**Supplementary data3** The data of the original western blots images

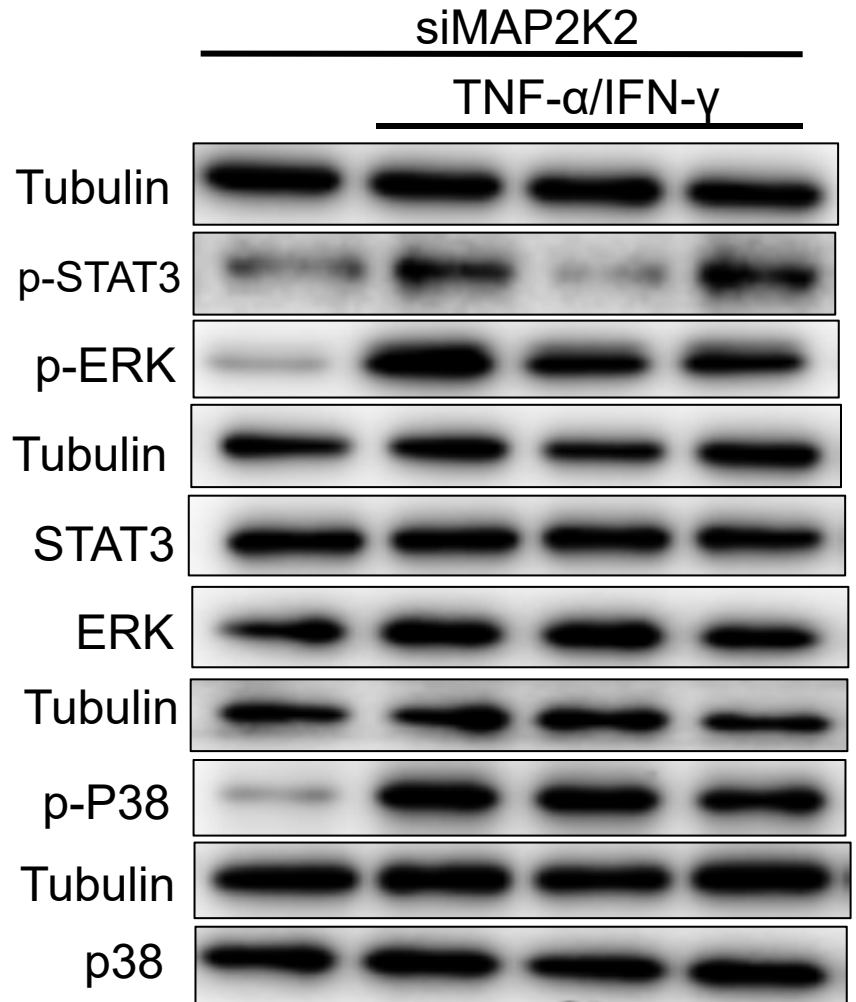
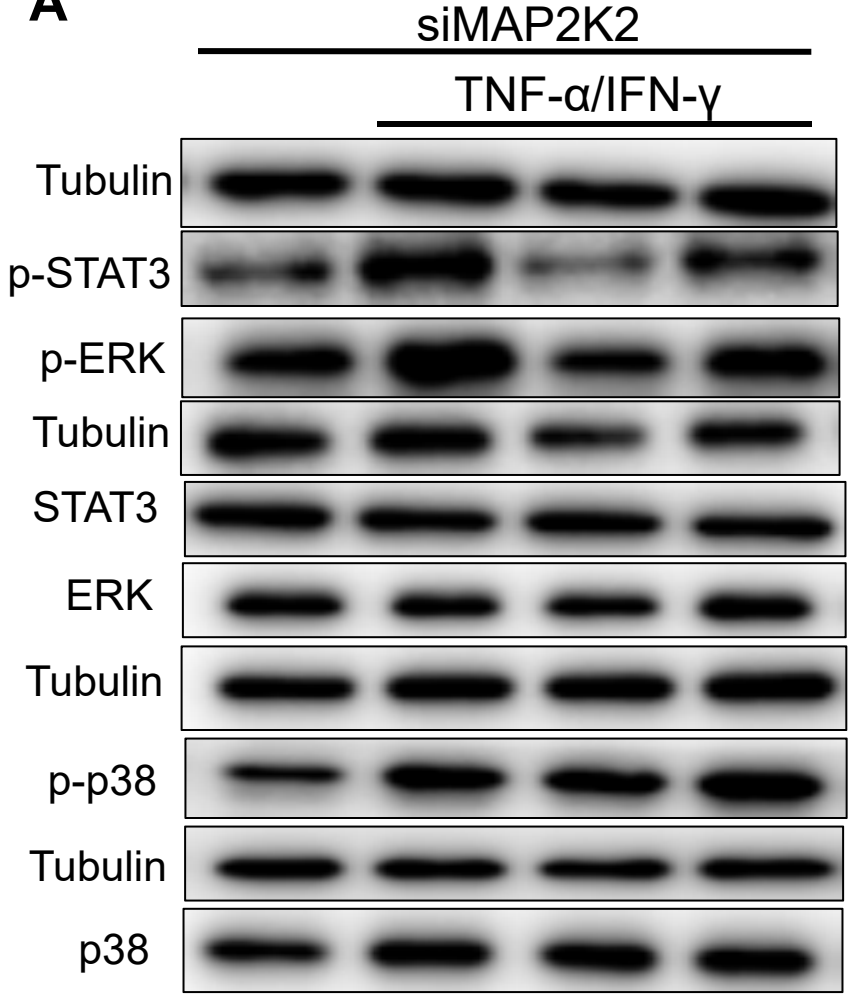




**Fig. S3** The original western blot images of **Fig. 7C** in the manuscript.(A,B,C)

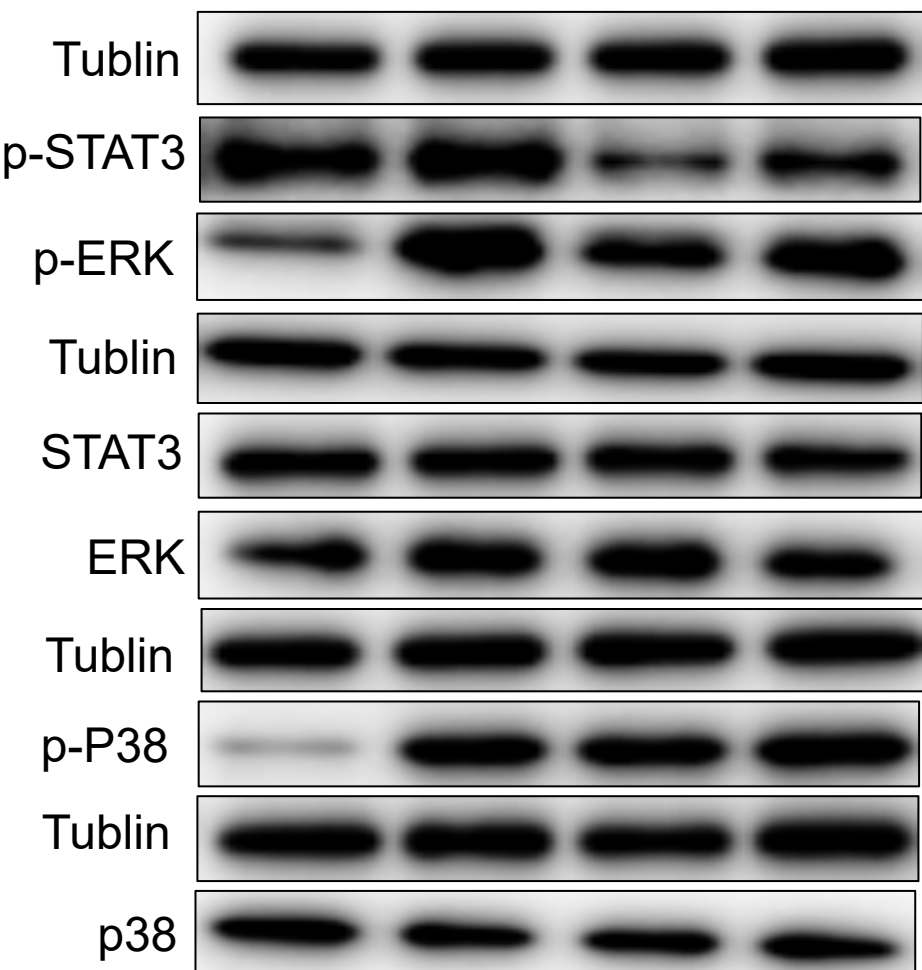
**Supplementary data4** The data of the original western blots images

**A**

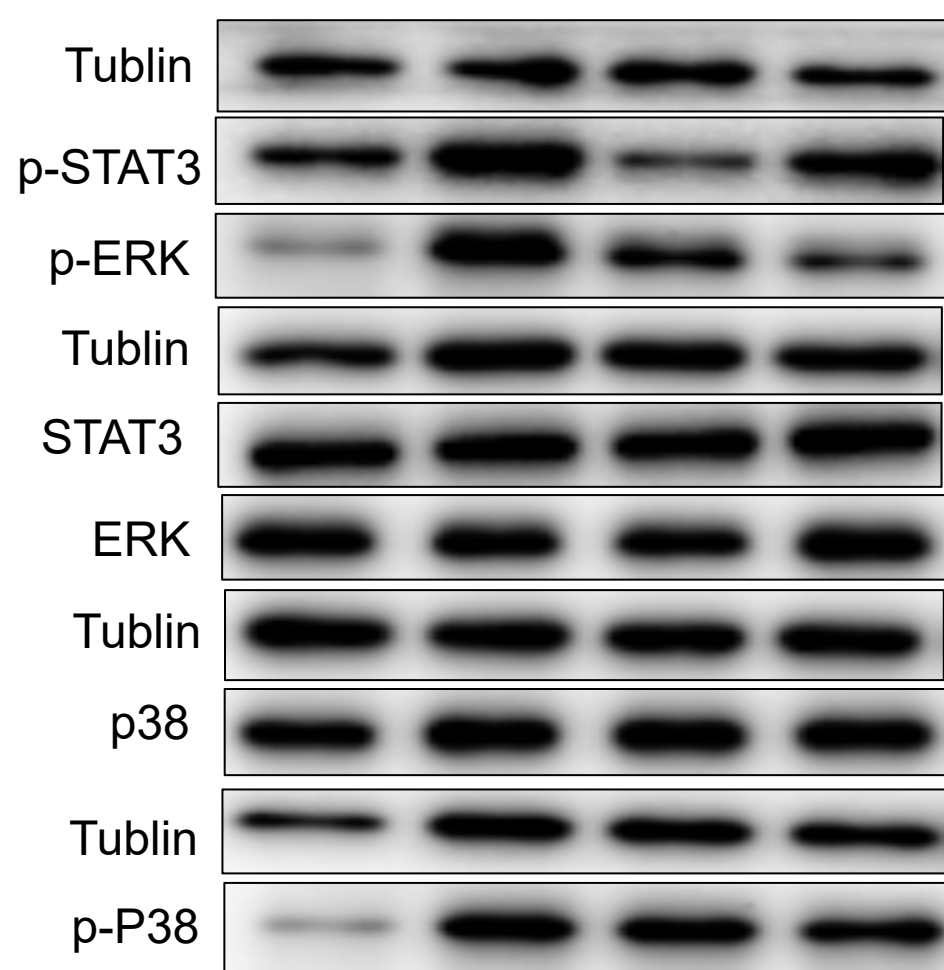


**B**

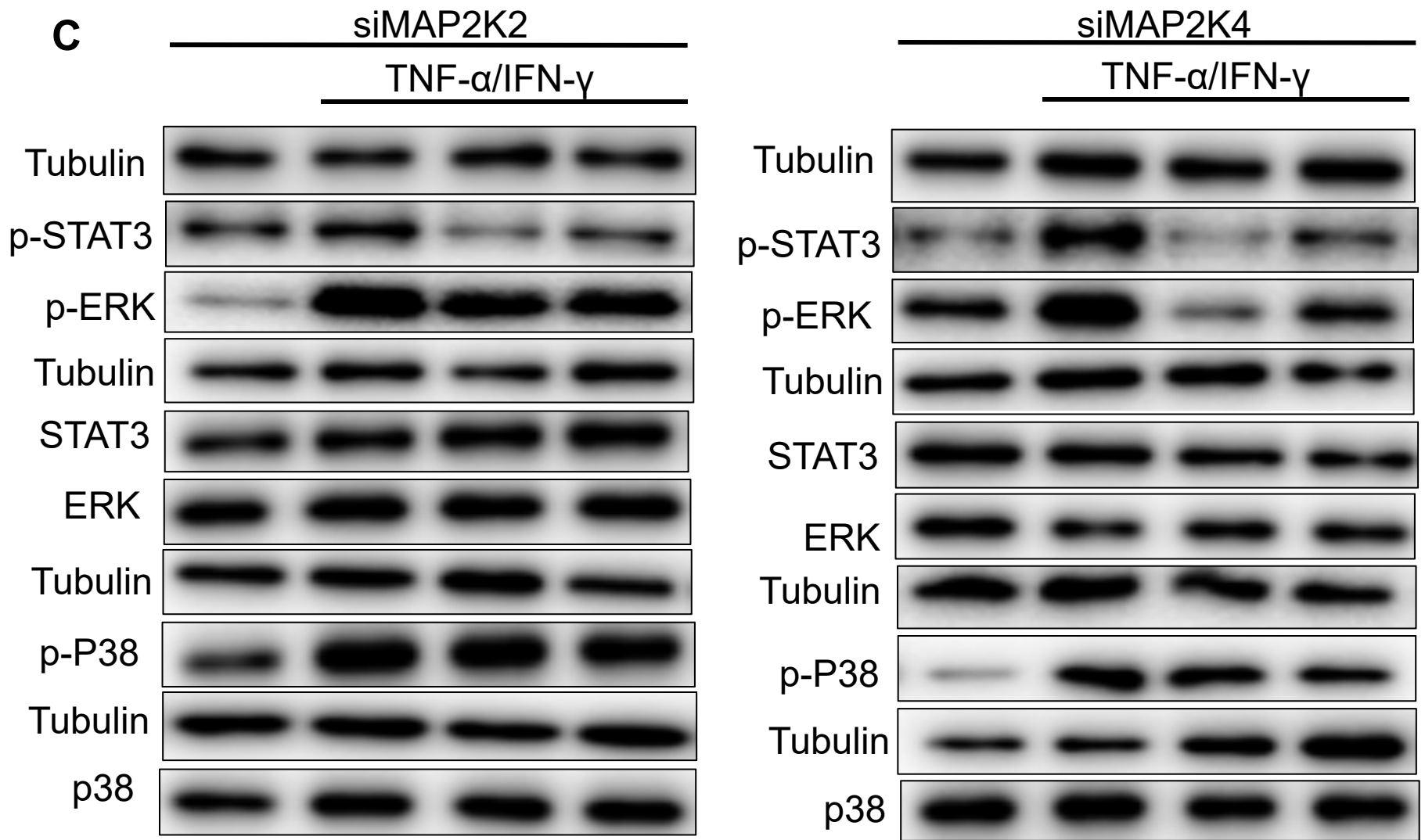
siMAP2K2

TNF- $\alpha$ /IFN- $\gamma$ 

siMAP2K4

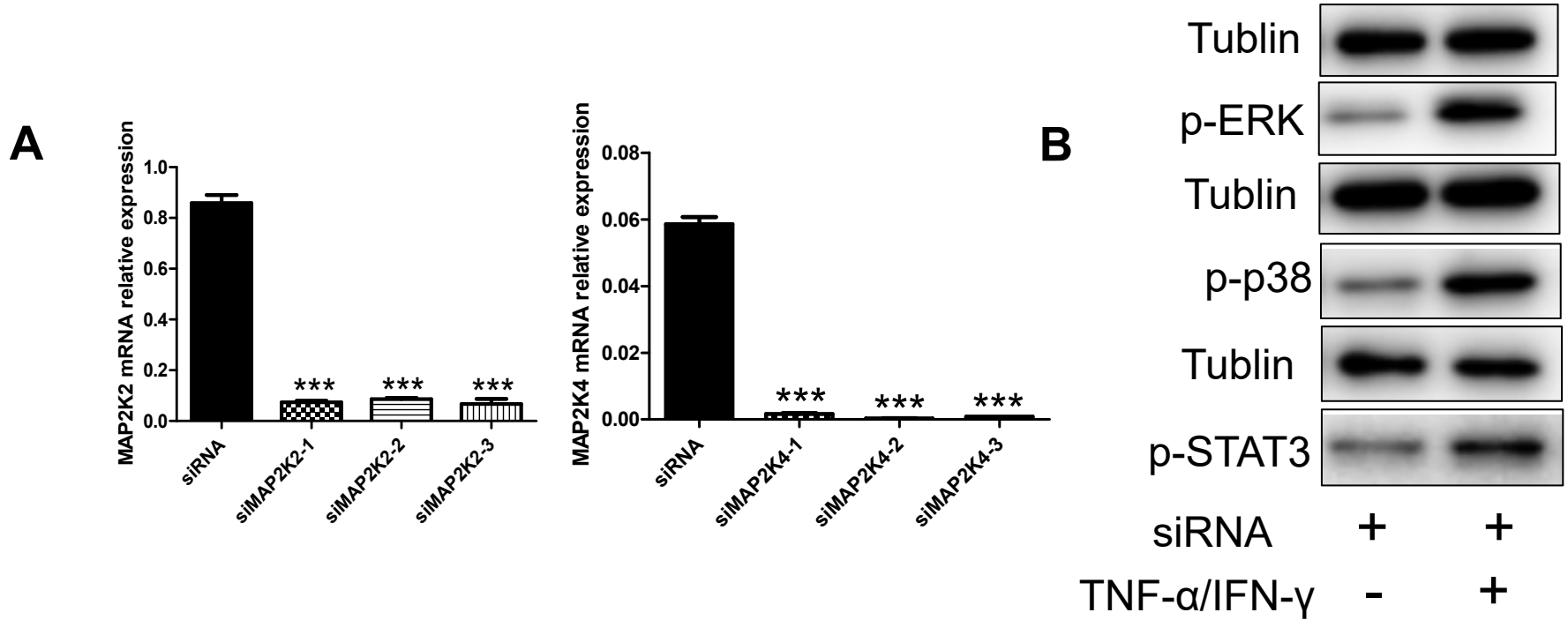
TNF- $\alpha$ /IFN- $\gamma$ 





**Fig. S4** The original western blot images of **Fig. 8A** in the manuscript.(A,B,C)

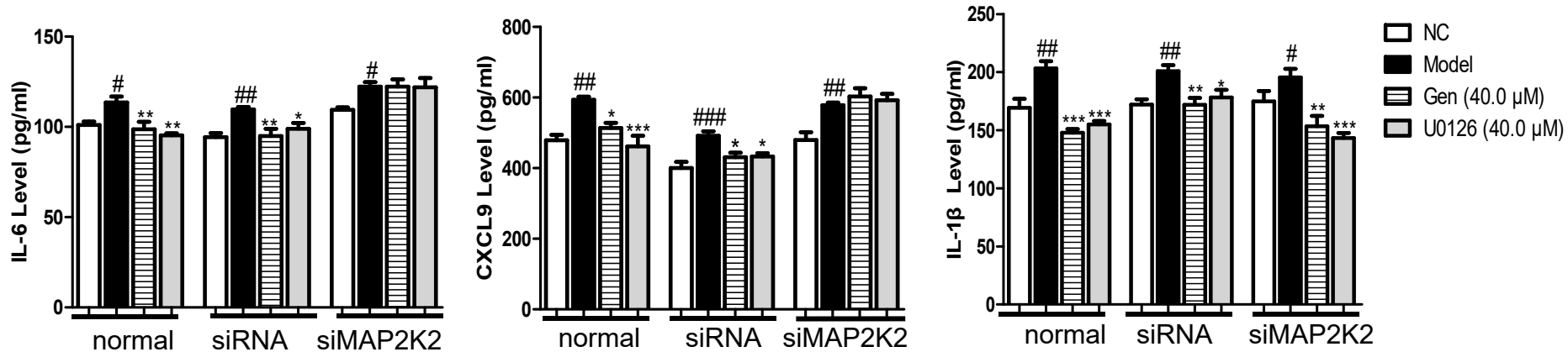
**Supplementary data5** The data of the original western blots images



**Fig. S5** (A) Relative mRNA levels of MAP2K2 and MAP2K4 in HaCaT cells transfected with the indicated siRNA. (B) The western blot images of p-ERK, p-p38 and p-STAT3 transfected in siRNA

## Supplementary data6

A



**Fig. S6** HaCat cells were transfected with 50 nM control siRNA, siMAP2K2, for 72 h, and then treated with genistein (40  $\mu$ M) and U0126 (40  $\mu$ M) for 1 h, followed by stimulating with TNF- $\alpha$ /IFN- $\gamma$  for another 16 h. The expression of CXCL9, IL-6 and IL-1 $\beta$  in supernatant were measured.