

Fig. S1. Western blot analysis expression of IL1 β in PTX3-ko and WT mice at 0h and 72h after injection with 10 mg/kg LPS (n = 5 mice per group).

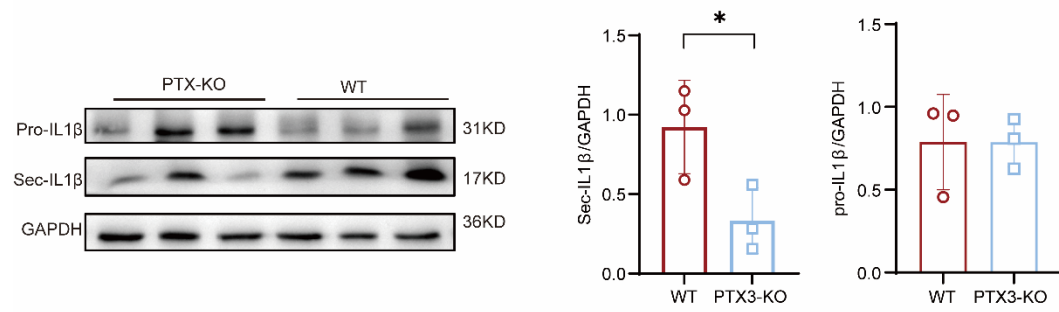
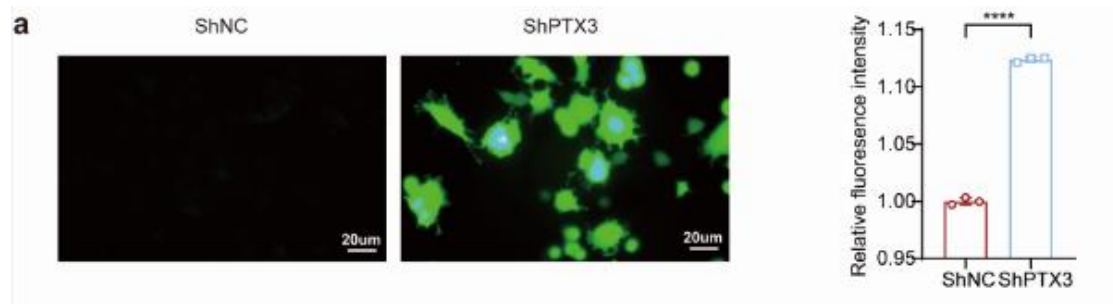
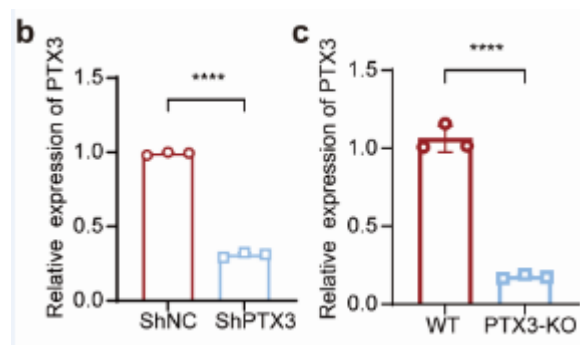


Fig. S2.

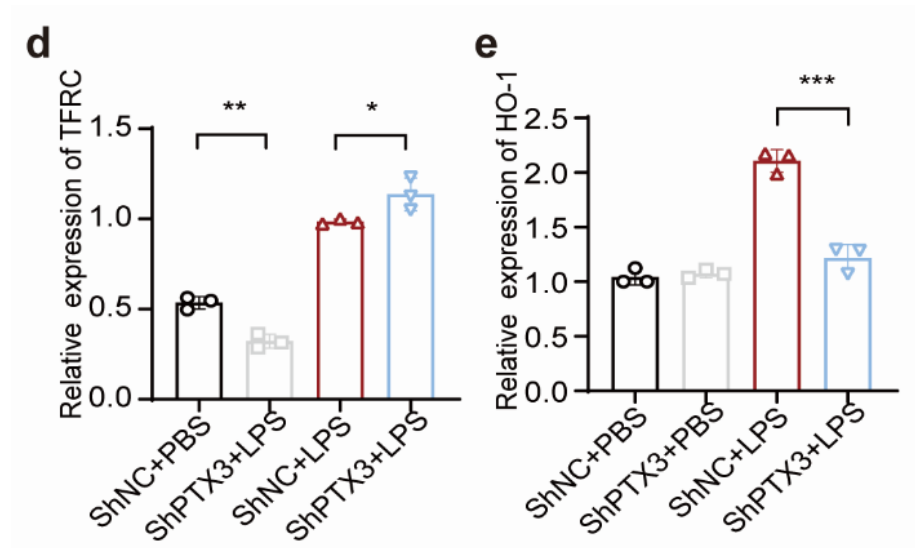
(a) Fluorescence microscopy confirmed the efficiency of PTX3 in AML12 cell lines. (original magnification = $\times 200$, scale bar = $100 \mu\text{m}$)



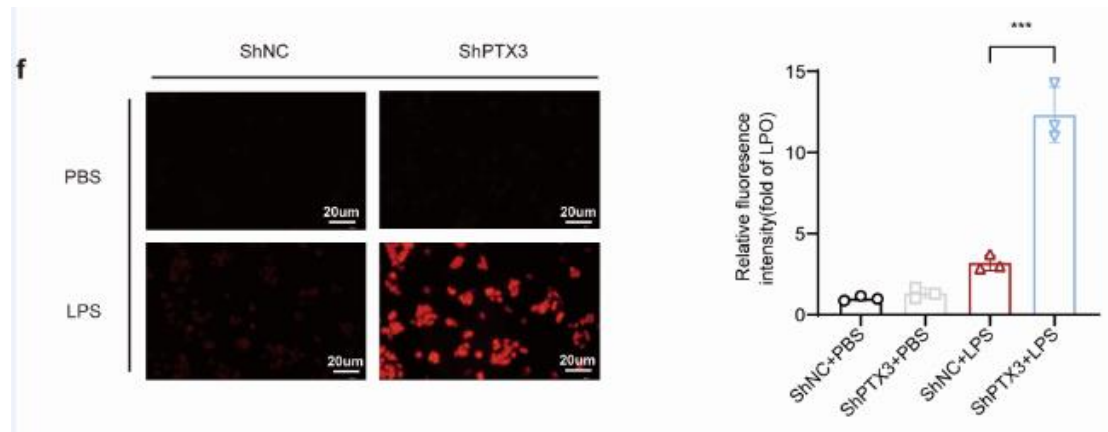
(b,c) qRT-PCR tested the efficiency of PTX3 in AML12 cell lines and hepatocytes isolated from mice (n=3).



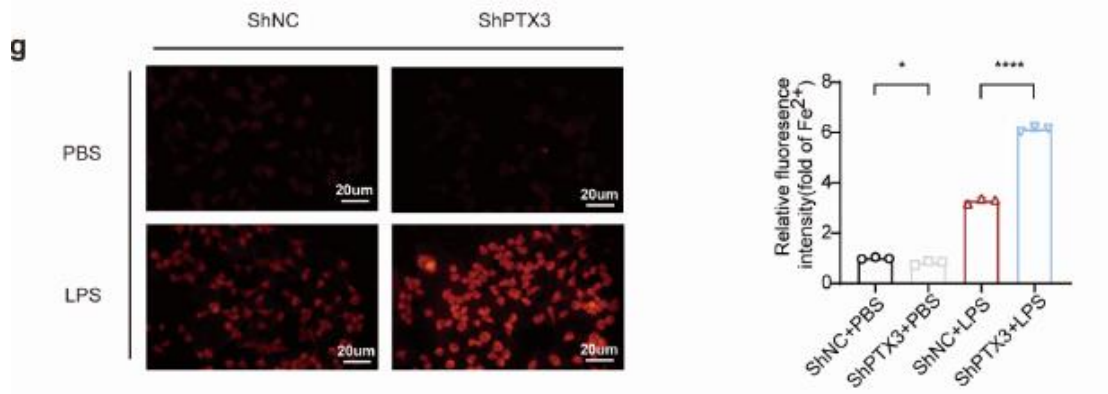
qRT-PCR detected the expression of TFRC (d) and HO-1 (e) in mouse AML12 cells with or without PTX3 knock down after treated with 10 ng/mL LPS for 12h (n=3).



(f) The levels of Lipid peroxide (red) in mouse liver primary hepatocytes after treated with 10 ng/mL LPS for 12h (n=3). (original magnification = $\times 400$, scale bar = 20 μm)



(g) Intracellular Fe^{2+} levels measured by FerroOrange (red) with 10 ng/mL LPS for 24h (n=3). (original magnification = $\times 200$, scale bar = 100 μm)



(h) ROS levels in mouse liver primary hepatocytes measured by MitoSOX Dye Red with 10 ng/mL LPS for 12h (n=3). (original magnification = $\times 200$, scale bar = 100 μm)

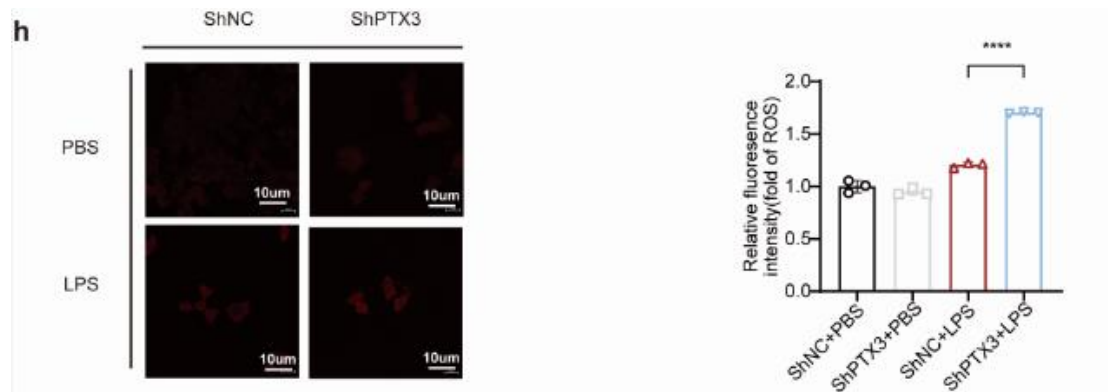


Fig. S3. qRT-PCR (a) and western blot (b) detected the expression of cell death models in AML12 cells with or without PTX3 knockout after treated with 10 ng/mL LPS for 12h.

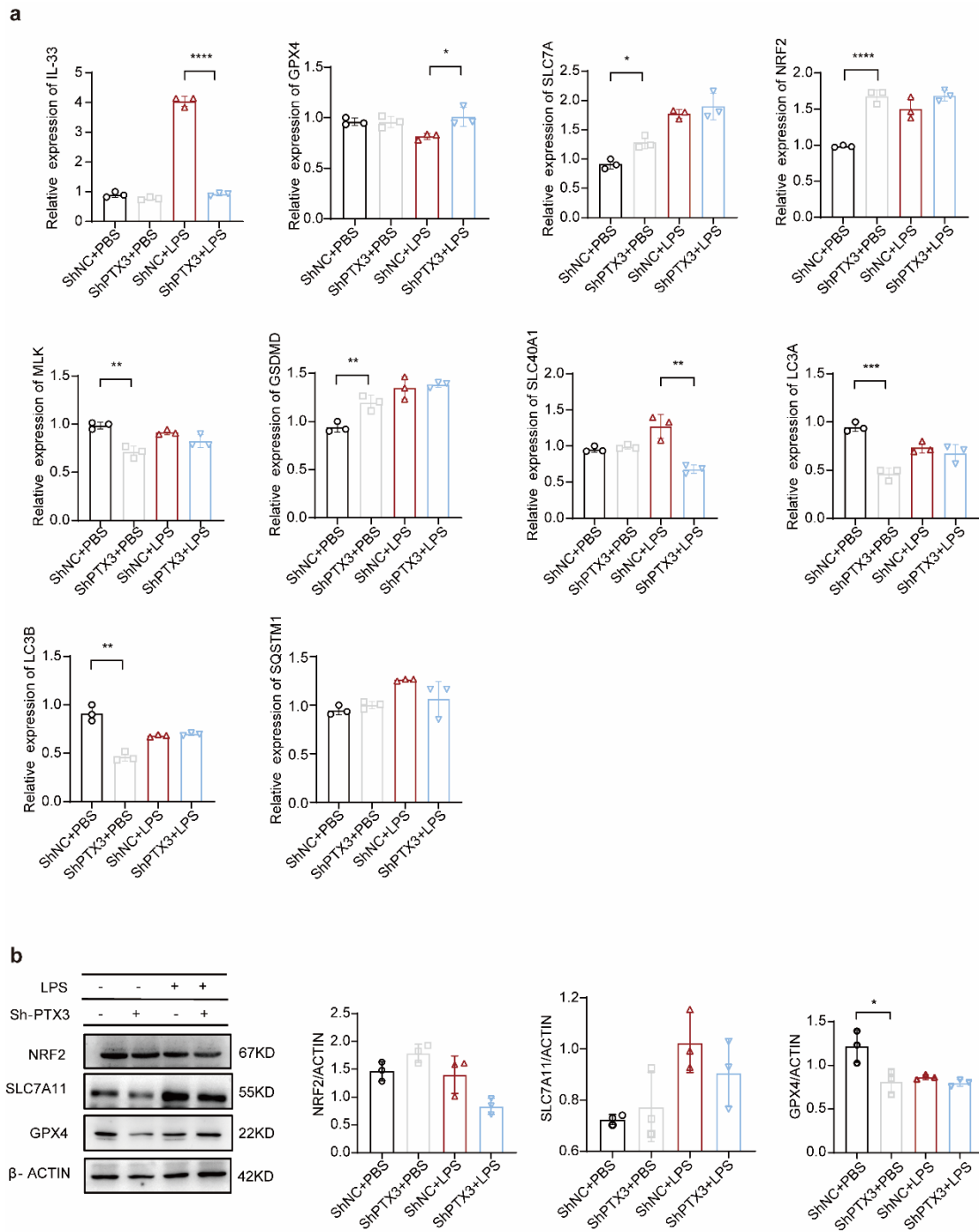
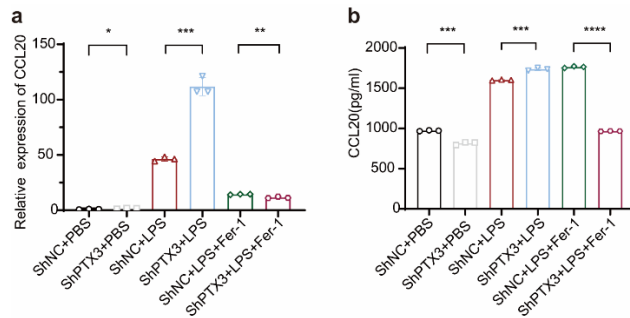
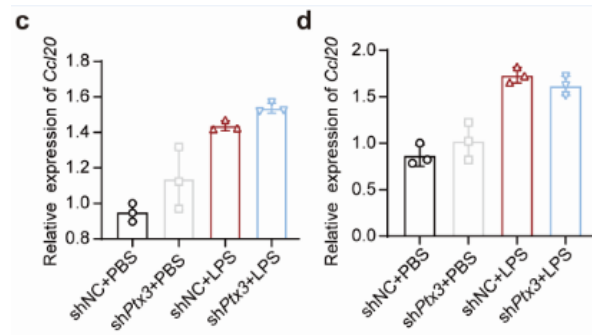


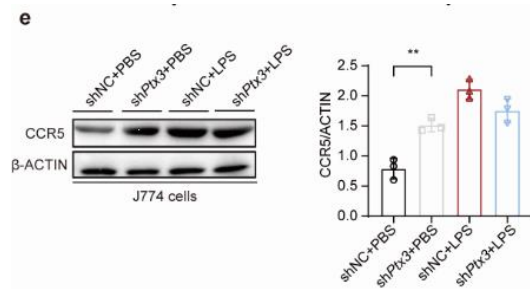
Fig. S4. qRT-PCR(a) and ELISA(b) detected the expression of CCL20 in mouse liver primary hepatocytes from WT and PTX3^{-/-} after treated with 10 ng/mL LPS for 12h. And 10 μ M ferroptosis inhibitors Ferrostatin-1 for 12h reduced CCL20 secretion. 20 μ M ferroptosis inducer Erastin increased the levels of CCL20 (n=3).



(c,d) qRT-PCR detected the expression of *Ccl20* in J774 cells and Raw264.7 cells after treated with 10 ng/mL LPS.



(e) western blot detected the expression of CCR5 in J774 cells with or without *Ptx3* knockdown after treated with LPS.



(f,g) qRT-PCR detected the expression of *Ccr6* in J774 cells and Raw 264.7 cells with or without *Ptx3* knockdown after treated with CCL20 recombinant proteins.

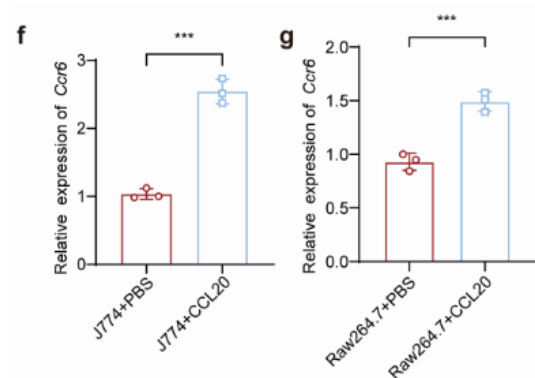


Fig. S5. qRT-PCR(a) and Elisa (b) tested the efficiency of knock down PTX3 (n=3). Cell migration was tested via crystal violet staining(c) (n=5). (original magnification = 200×, scale bar = 100μm)

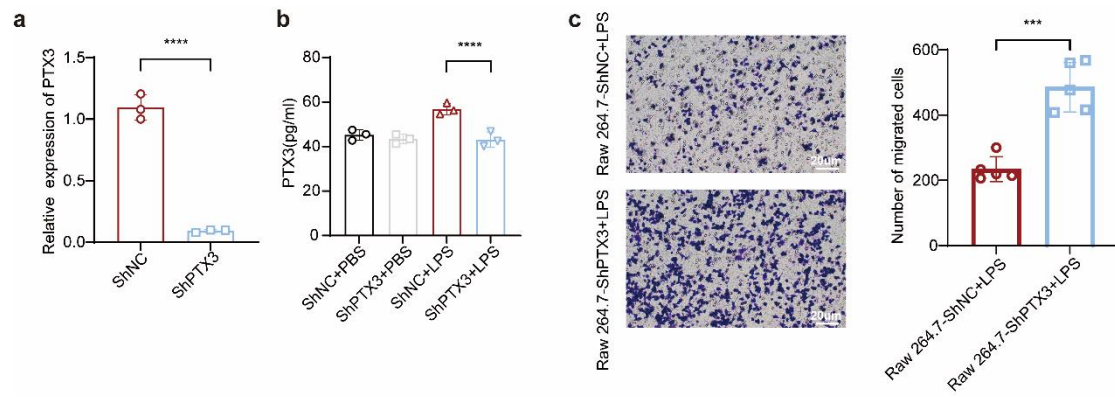


Table S1

Gene	Species	Forward primer	Reverse primer
CCL20	Mice	GTGGGTTTCACAAGACAGATGGC	CCAGTTCTGCTTTGGATCAGCG
PTX3	Mice	AAGTGGAACCCCTATGAGATTCAG	CCAGCTTGTTCCTTTCCACC
GAPDH	Mice	CATCACTGCCACCCAGAAGACTG	ATGCCAGTGAGCTTCCCCTTCAG
IL-33	Mice	CTACTGCATGAGACTCCGTTCTG	AGAATCCCCTGGATAGGCAGAG
TNF- α	Mice	GGGTTGTACCTTGTCTACTCCCAG	GAGATAGCAAATCGGCTGACG
GSDMD	Mice	GCGCTTTGTTCCATCGGAAAG	CCATTTCCAAGCTCTCCAGTTCTG
MLKL	Mice	GAATACCGTTTTAGATGTCAGCC	CTTCCACGTAATTTGCAACTG
TFRC	Mice	GAAGTCCAGTGTGGGAACAGGT	CAACCACTCAGTGGCACCAACA
IL-1 β	Mice	TGGACCTTCCAGGATGAGGACA	GTTTCATCTCGGAGCCTGTAGTG
Slc7a11/xCT	Mice	CTTTGTTGCCCTCTCCTGCTTC	CAGAGGAGTGTGCTTGTGGACA
Arg1	Mice	AAGAATGGAAGAGTCAGTGTGG	GGGAGTGTGATGTCAGTGTG
CD68	Mice	GCTTCTGCTGTGGAAATGCAAG	TGAGCAGCCTGTAGCCTTAGAGA
CD86	Mice	ACGTATTGGAAGGAGATTACAGCT	TCTGTGAGCCTTACTATCCCAGC
Gpx4	Mice	CCGGCTACAACGTCAAGTTTG	CCCTTGGGCTGGACTTTTCATC
Nrf2/Nfe2l2	Mice	TTCCCATTTGTAGATGACCATGAG	CTCCATGTCCTGCTCTATGCTG
HO-1/Hmox1	Mice	CACTCTGGAGATGACACCTGAG	GTGTTCTCTGTCAGCATCACC
FPN1/Slc40a1	Mice	CCATAGTCTCTGTCAGCCTGCT	CTTGCAGCAACTGTGTCACCGT
LC3A/Map1lc3a	Mice	CGTCCTGGACAAGACCAAGT	ACCATCTACAGGAAGCCGTC
LC3B/Map1lc3b	Mice	CATGTTAACATGAGCGAGTTGGTC	GTTTCATAGATGTCAGCGATGGG
NF- κ B	Mice	GCTGCCAAAGAAGGACACGACA	GGCAGGCTATTGCTCATCACAG
SQSTM1	Mice	GCTCTTCGGAAGTCAGCAAACC	GCAGTTTCCCAGACTCCATCTGT
ERK1	Mice	GGCTTTCTGACGGAGTATGTGG	GTTGGAGAGCATCTCAGCCAGA
ERK2	Mice	TCAAGCCTTCCAACCTCCTGCT	AGCTCTGTACCAACGTGTGGCT
Stat6	Mice	AGATCTTCAACGACAACAGCCTC	CCAGGACACCATCAAACCACTG
CCR6	Mice	ATGCGGTCAACTTTAACTGTGG	CCCGGAAAGATTTGGTTGCCT
IL-4	Mice	GAACTCTAGTGTTCATGGAGCTG	TCTTTCAGTGATGTGGACTTGGAC
CD163	Mice	TGTTTCAGGAAGATTGGAAGTGAG	CCTCACTGGCATTAACTCGACC
CD206	Mice	GTTTCACCTGGAGTGATGGTTCTC	AGGACATGCCAGGGTCACTTT
IL-10	Mice	CGGGAAGACAATAACTGCACCC	CGGTTAGCAGTATGTTGTCCAGC

Fig.4 d

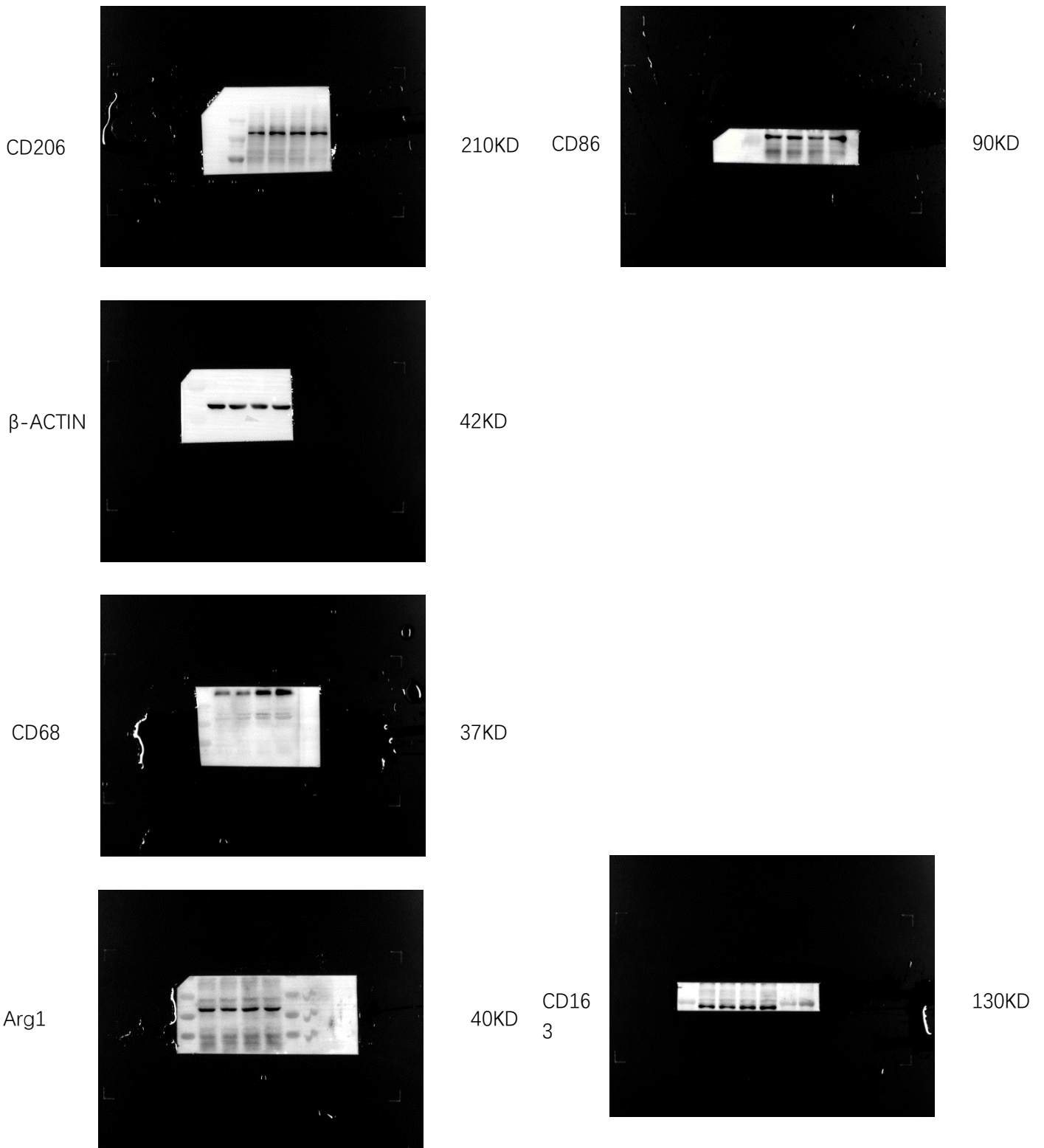
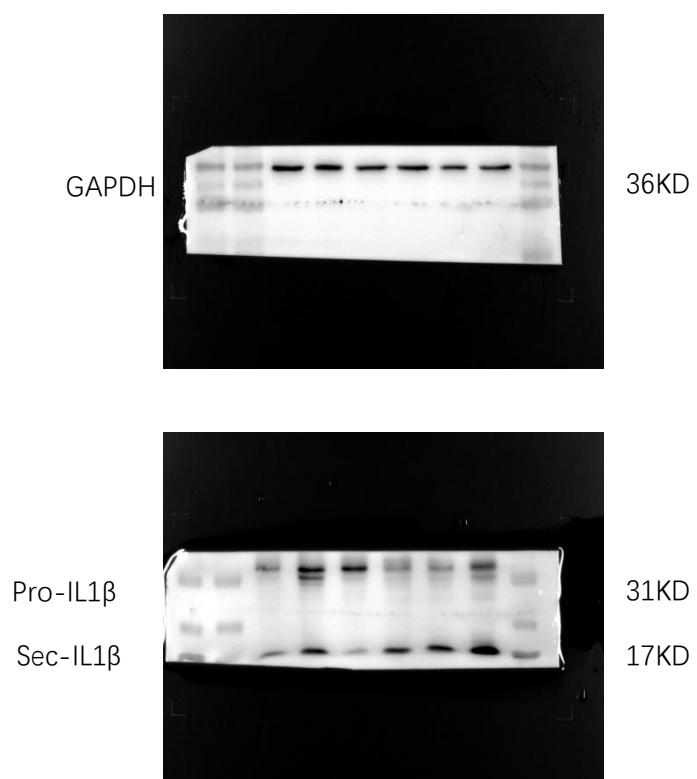


Fig S1



Fig

S3 b

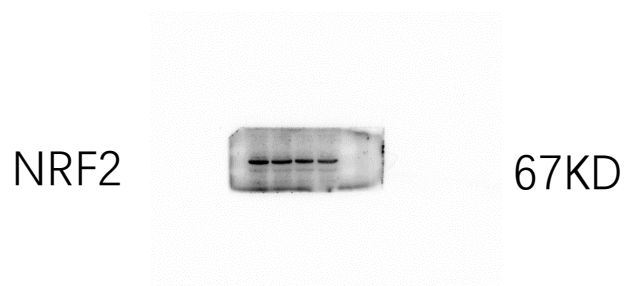
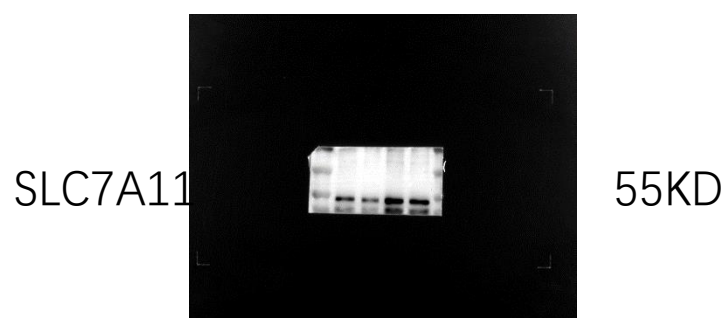
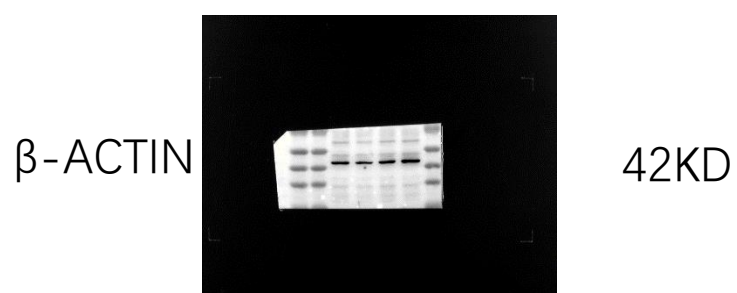
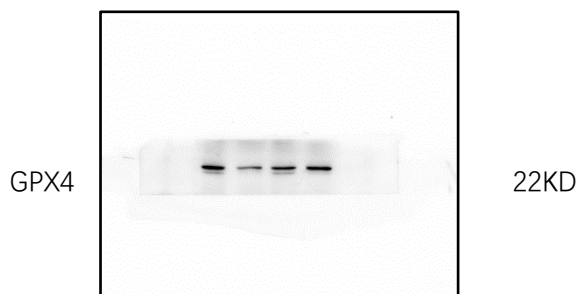


Fig.5 b

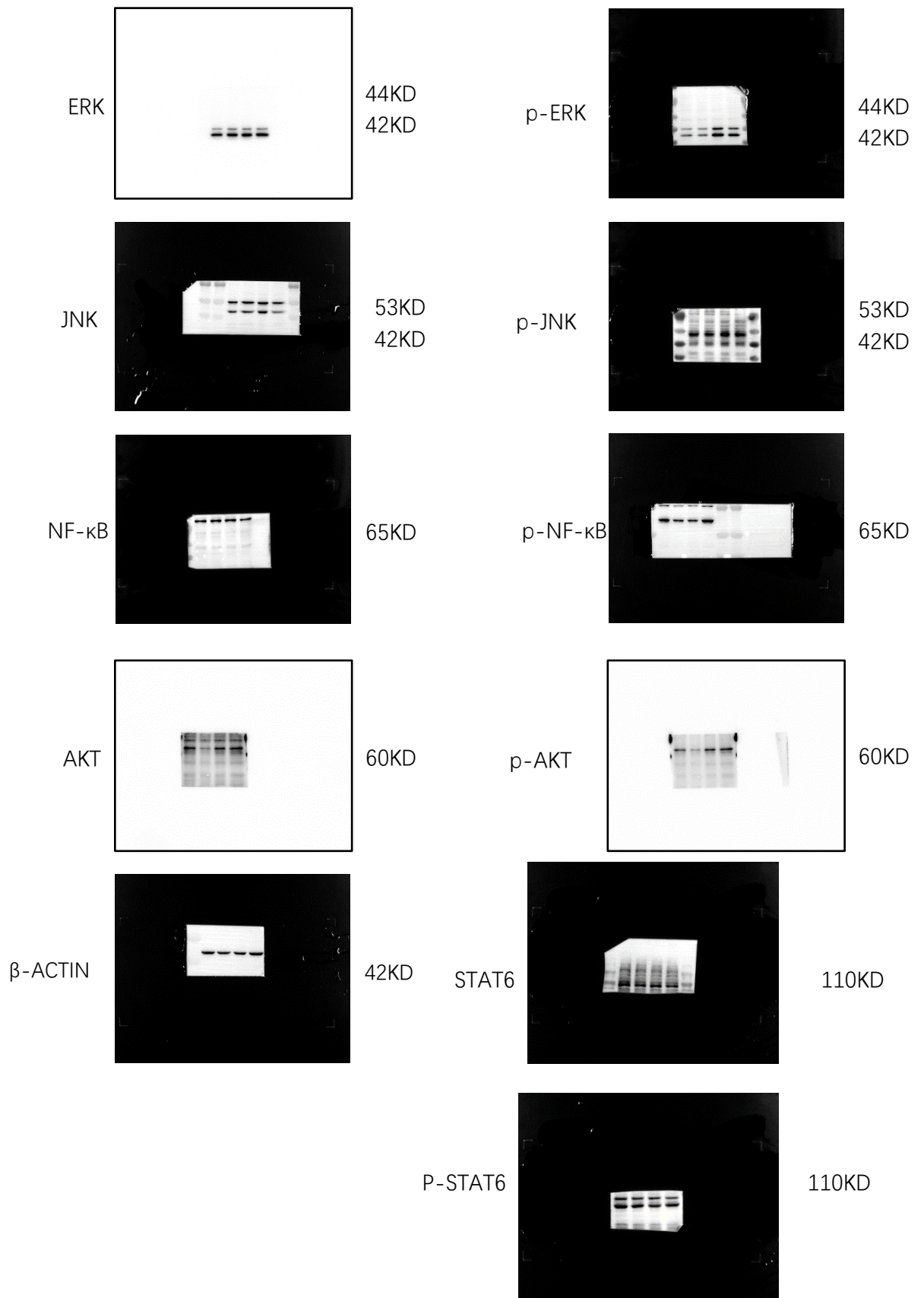


Fig.3 i

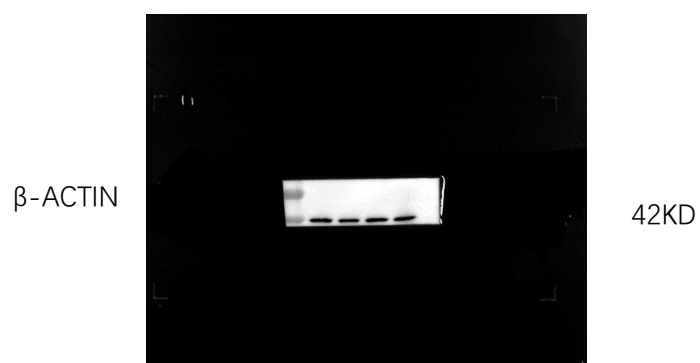
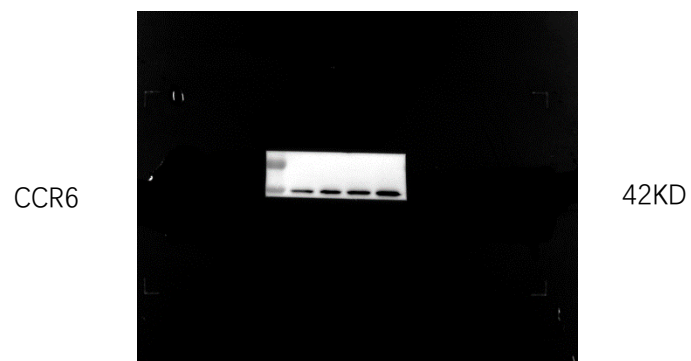
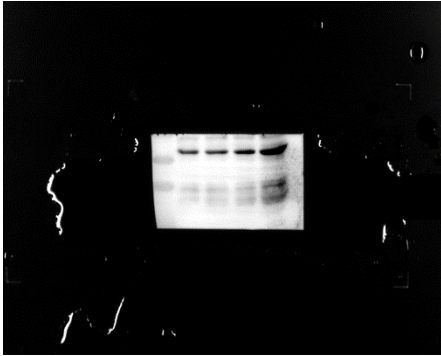


Fig.2

d

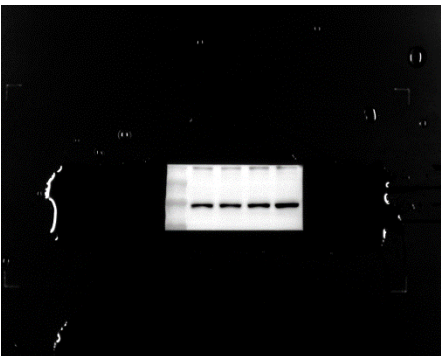
HO-1



β -ACTIN



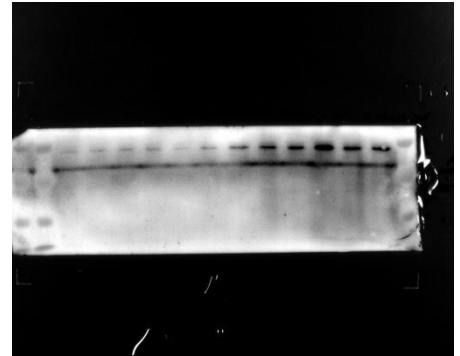
TFRC



f

33KD

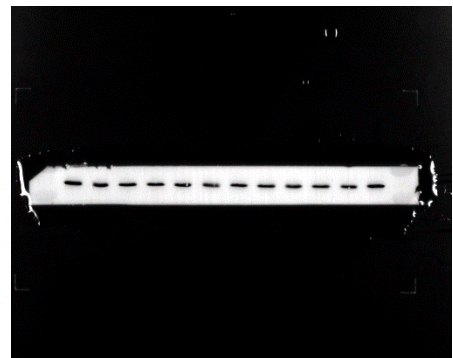
HO-1



33KD

42KD

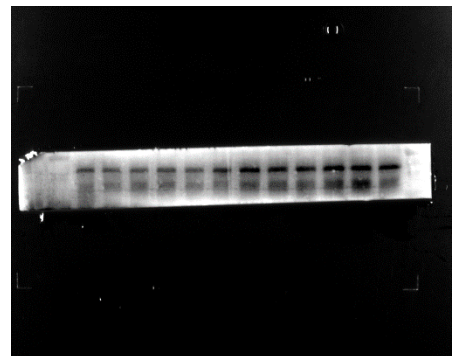
β -ACTIN



42KD

90KD

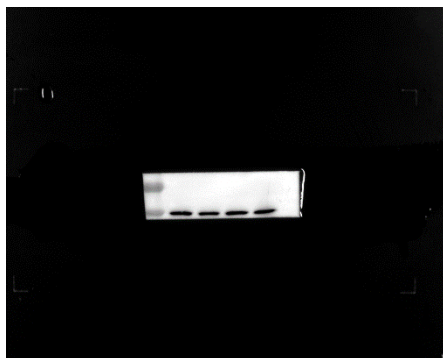
TFRC



90KD

Fig S4 e

β -ACTIN



42KD

CCR5



40KD