

Supplementary figures

IL-33-primed NLRP3 inflammasome in basophils drives IL-1 β production and promotes atopic dermatitis inflammation (Gunji et al.)

Supplementary Figure 1. Basophils express *Il3ra* and *Fcer1a*.

(A) An analysis of publicly available RNA-seq data (GSE116117) showing mRNA expression in mouse bone marrow and spleen (n = 1 for basophils of spleen, n = 3 for eosinophils, and n = 2 for others. P < 0.0001 by a one-way ANOVA). (B) An analysis of publicly available RNA-seq data showing mRNA expression in human peripheral blood (n = 2 for CD4⁺ terminal effector T cells, and n = 4 for others. P < 0.0001 by a one-way ANOVA).

Supplementary Figure 2. Basophils express NLRP3 inflammasome components.

(A) An analysis of publicly available RNA-seq data (GSE116117) showing mRNA expression in mouse bone marrow and spleen (n = 1 for basophils of spleen, n = 3 for eosinophils, and n = 2 for others. P < 0.0001 by a one-way ANOVA). (B) An analysis of publicly available RNA-seq data showing mRNA expression in human peripheral blood (n = 2 for CD4⁺ terminal effector T cells, and n = 4 for others. P < 0.0001 by a one-way ANOVA).

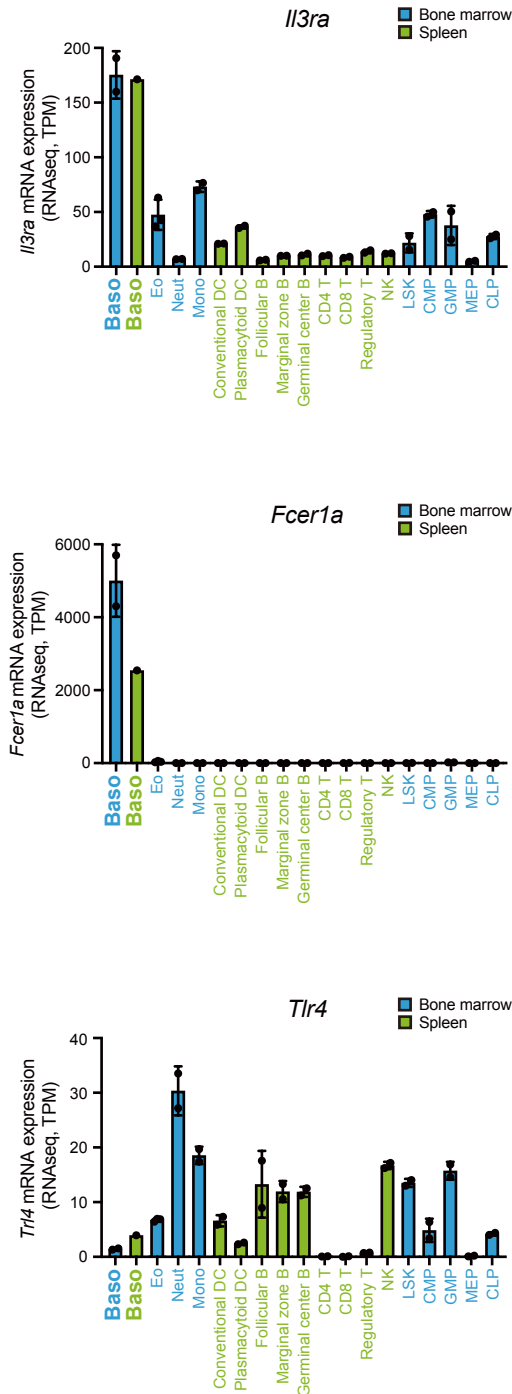
Supplementary Figure 3. A reanalysis of scRNA-seq data of an OXA-induced AD mouse model with a heat map.

Publicly available scRNA-seq data (GSE149121) were reanalyzed. A heat map is shown. Representative genes of each cluster are shown.

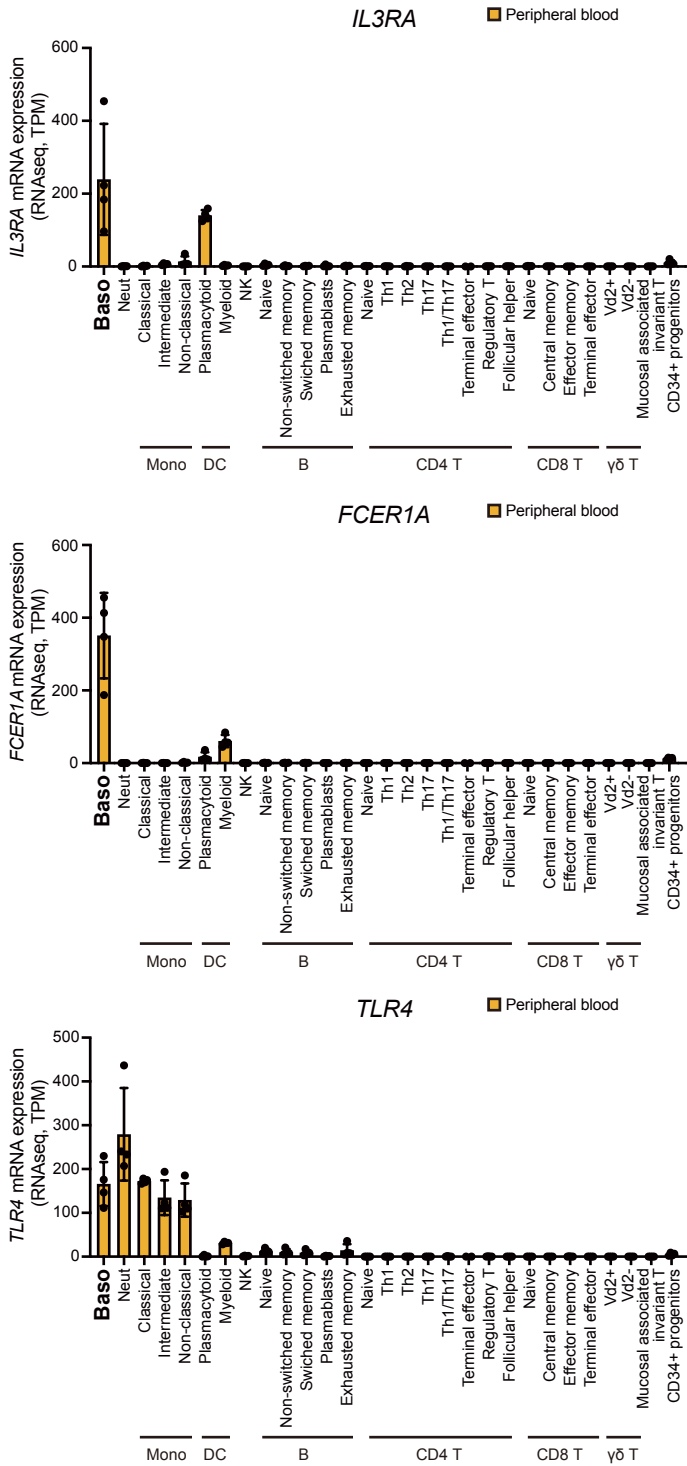
Supplementary Figure 4. A reanalysis of scRNA-seq data of an OXA-induced AD mouse model with a violin plots.

Publicly available scRNA-seq data (GSE149121) were reanalyzed. Violin plots showing the expression of *Fcer1a*, *Mcpt8*, *Mcpt4*, *Cma1*, and *Tpsb2* in control and OXA-treated skins are shown.

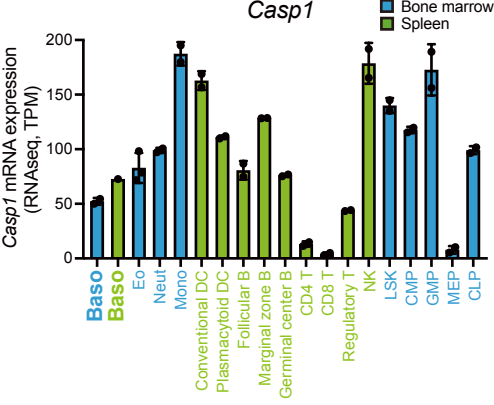
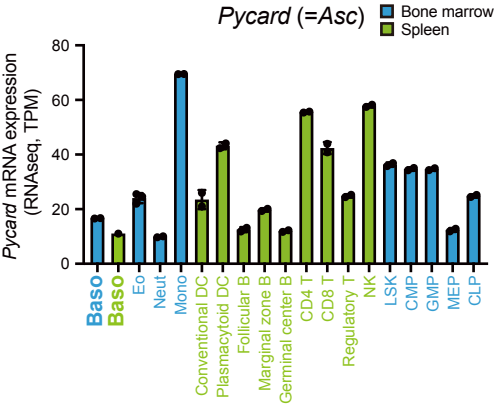
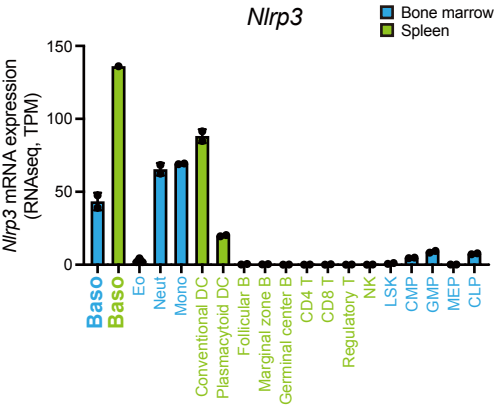
A Mouse bone marrow and spleen
(Choi, et al. Nucleic Acids Research 2018, GSE116177)



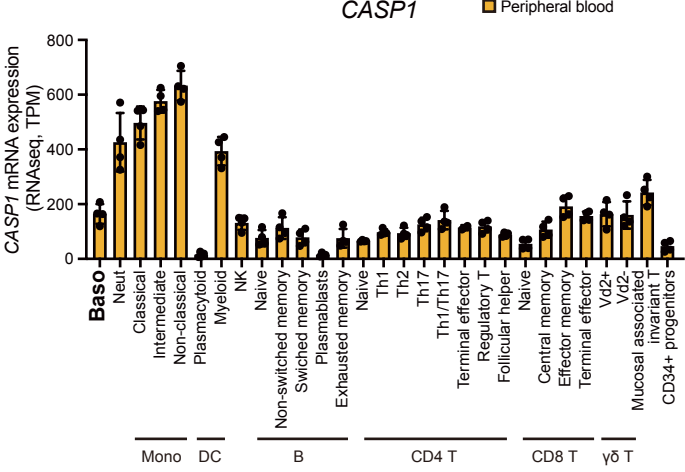
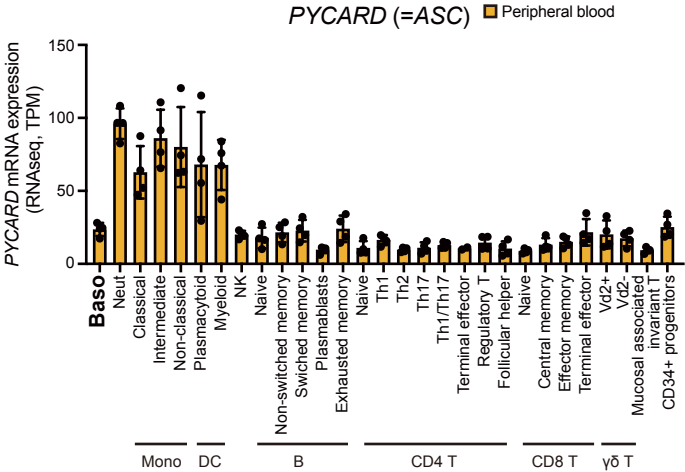
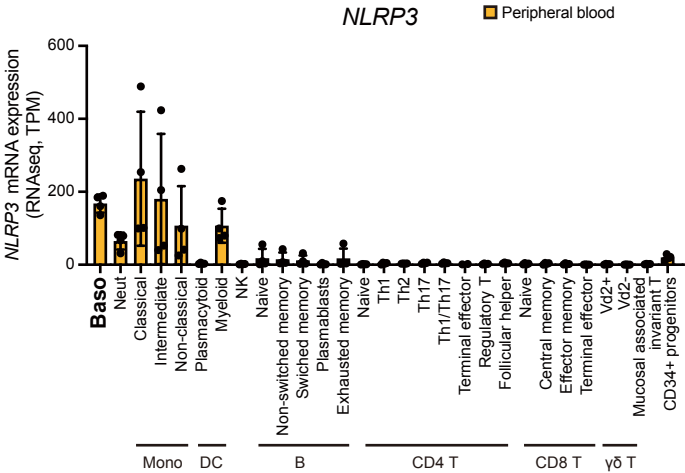
B Human peripheral blood
(Monaco, et al. Cell Reports 2019, GSE107011)

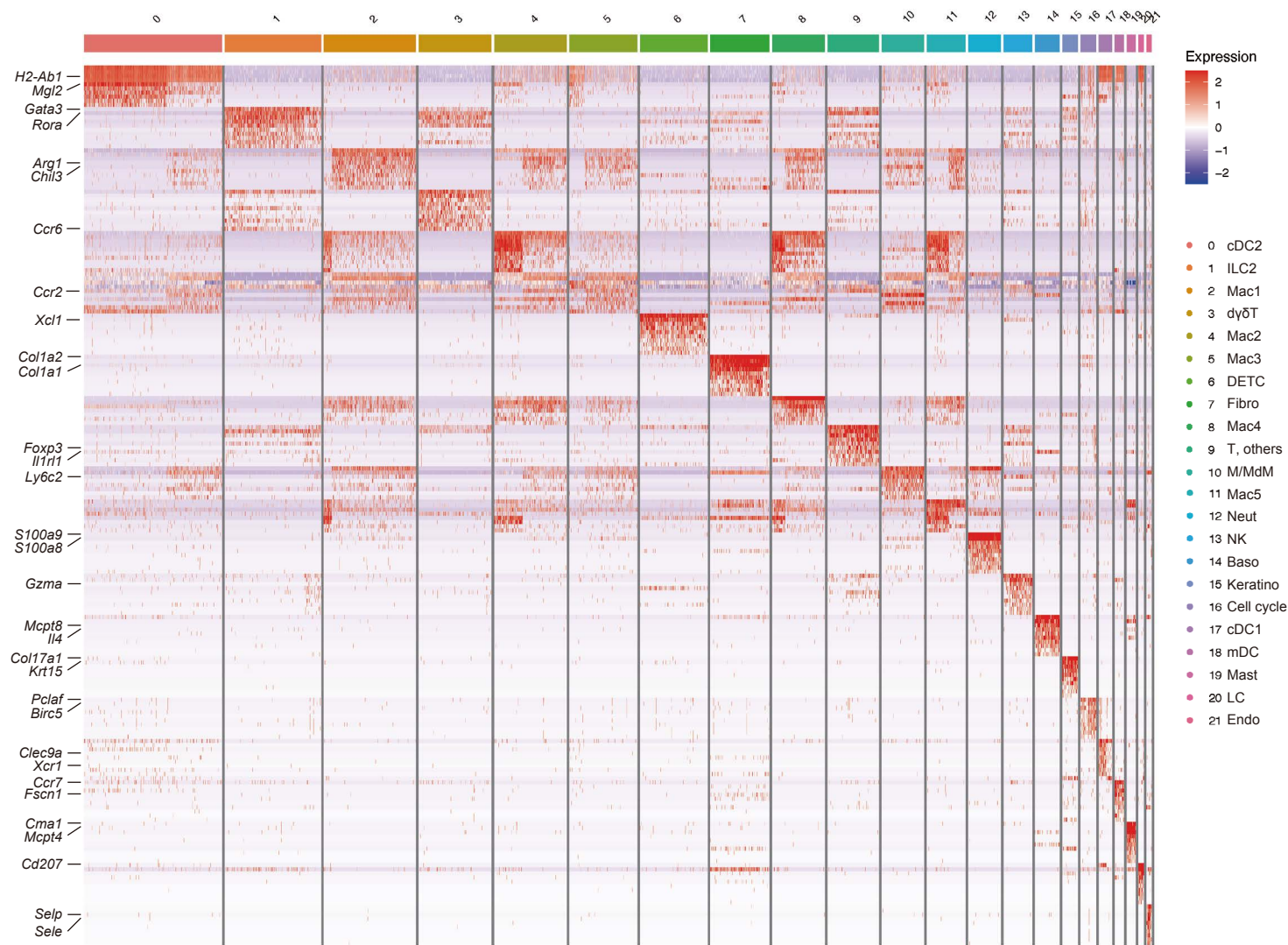


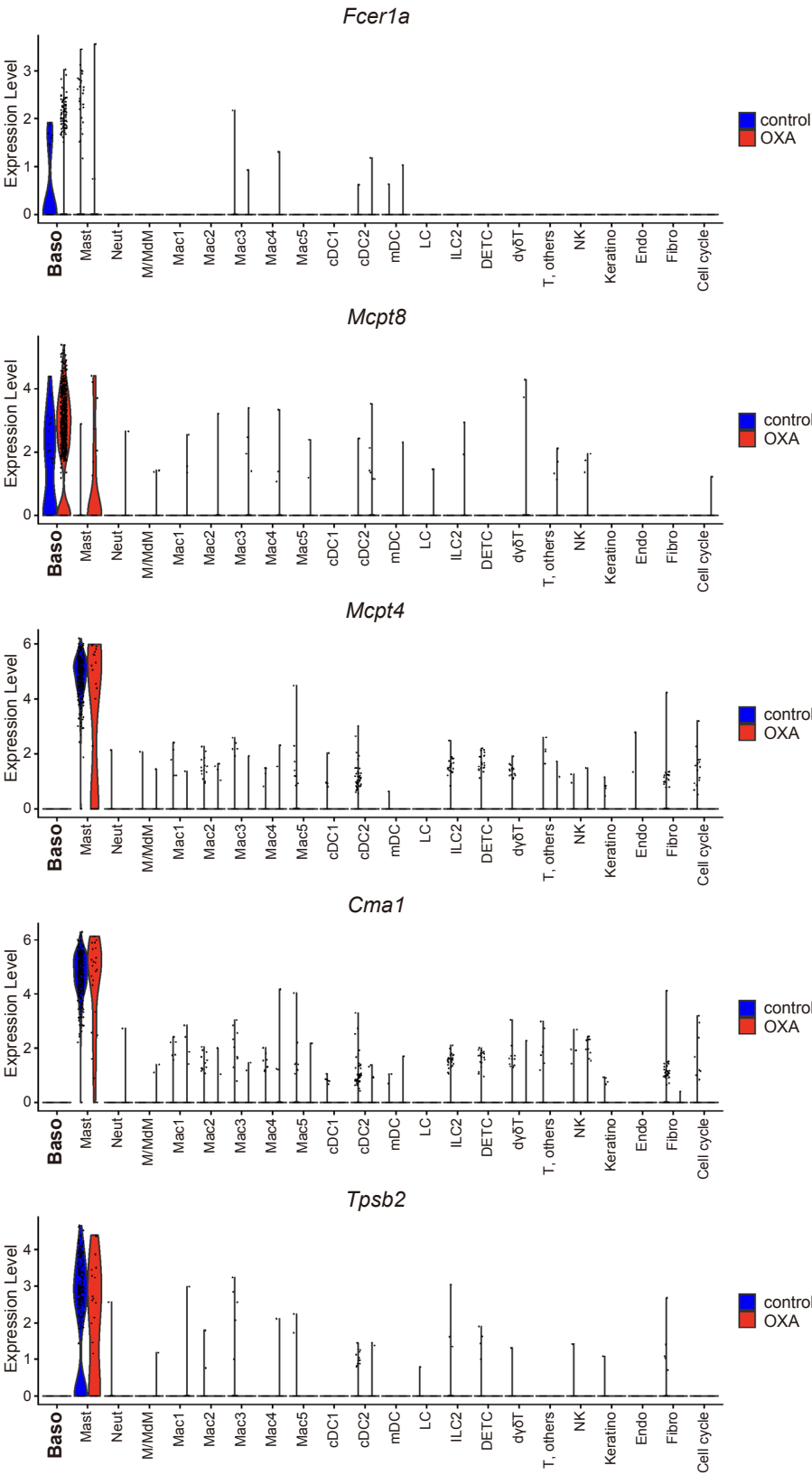
A Mouse bone marrow and spleen
(Choi, et al. Nucleic Acids Research 2018, GSE116177)



B Human peripheral blood
(Monaco, et al. Cell Reports 2019, GSE107011)





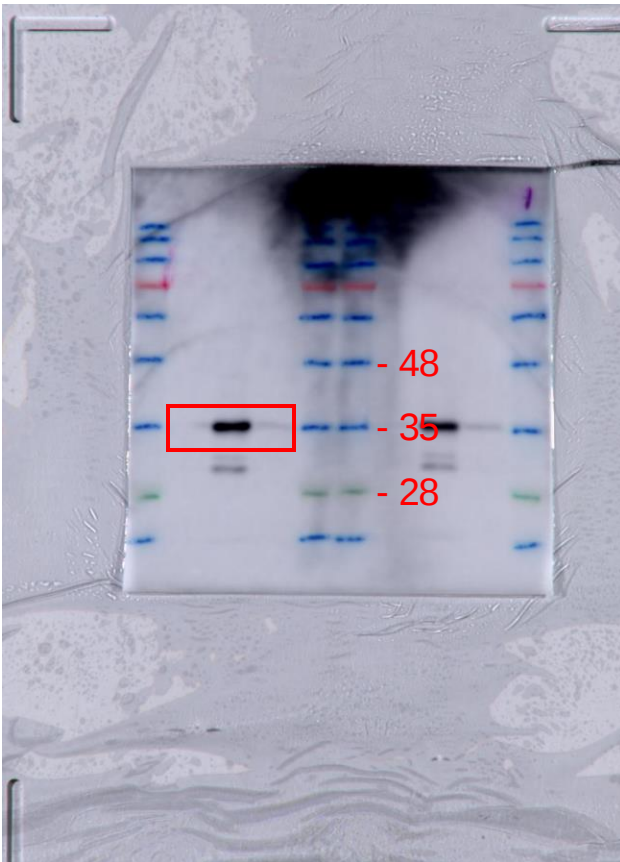


Source Data

Uncropped Immunoblotting

Fig. 1I

pro-IL-1 β



NLRP3

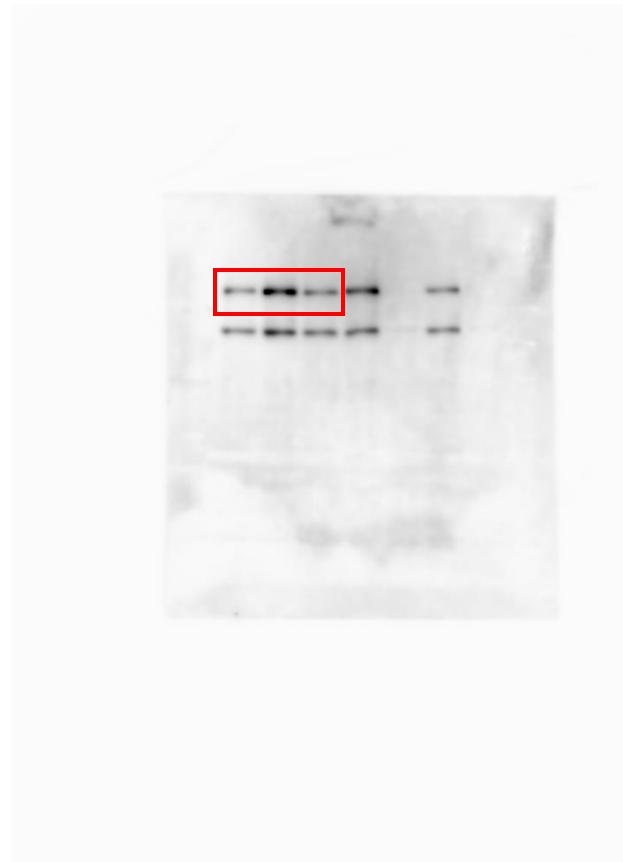
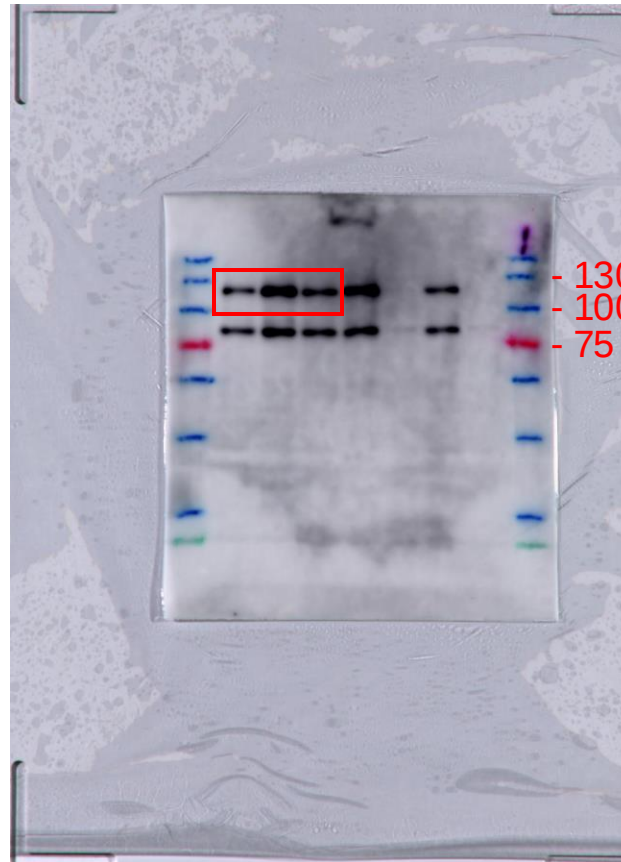


Fig. 1I

ASC

caspase-1

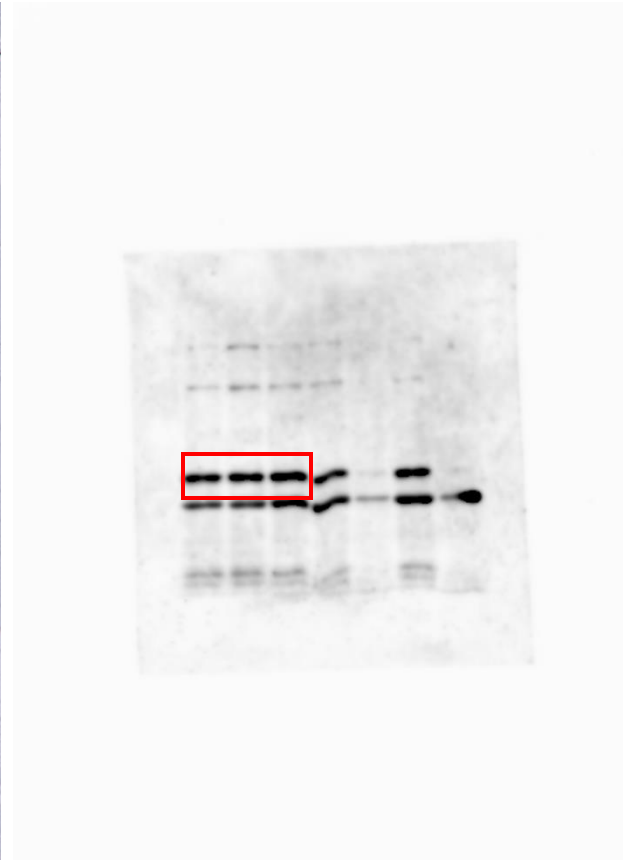
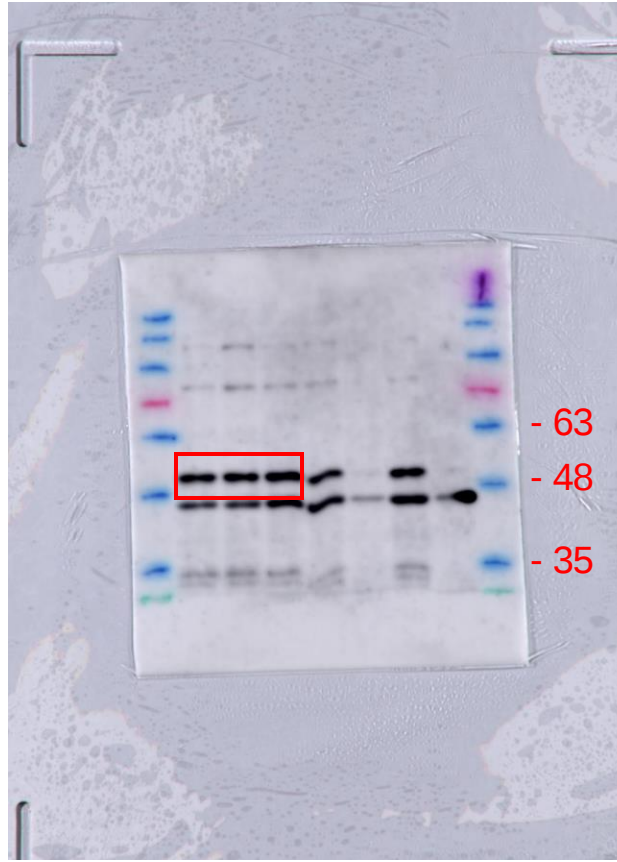
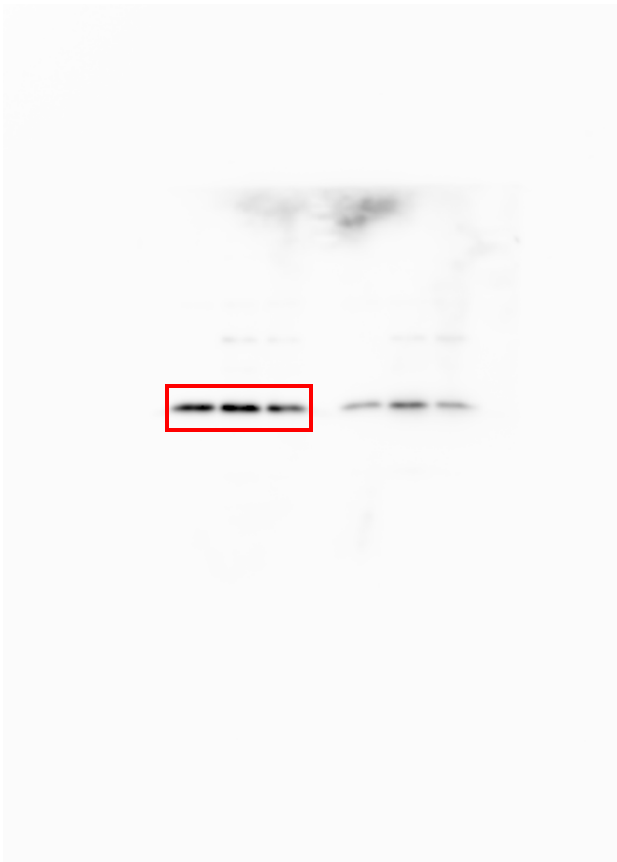
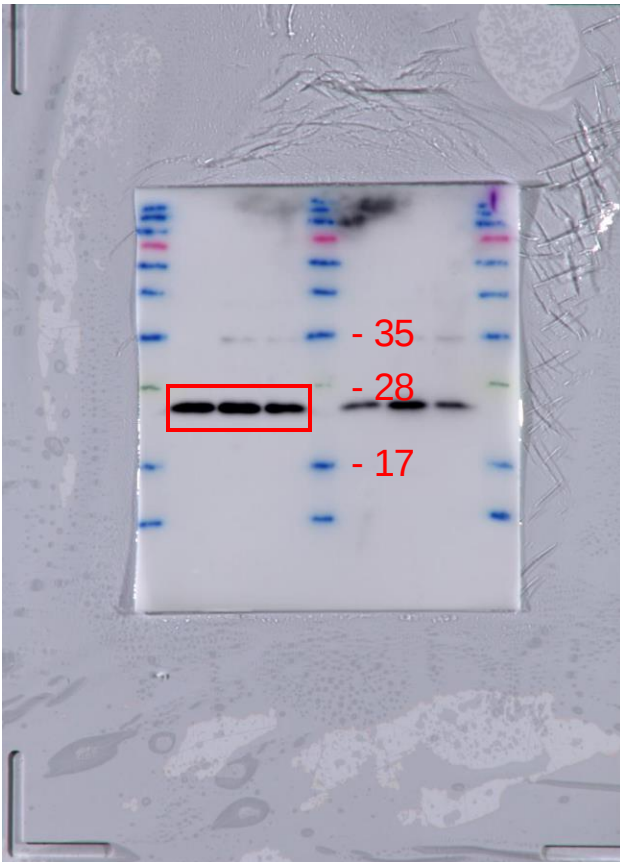


Fig. 1I

β -actin

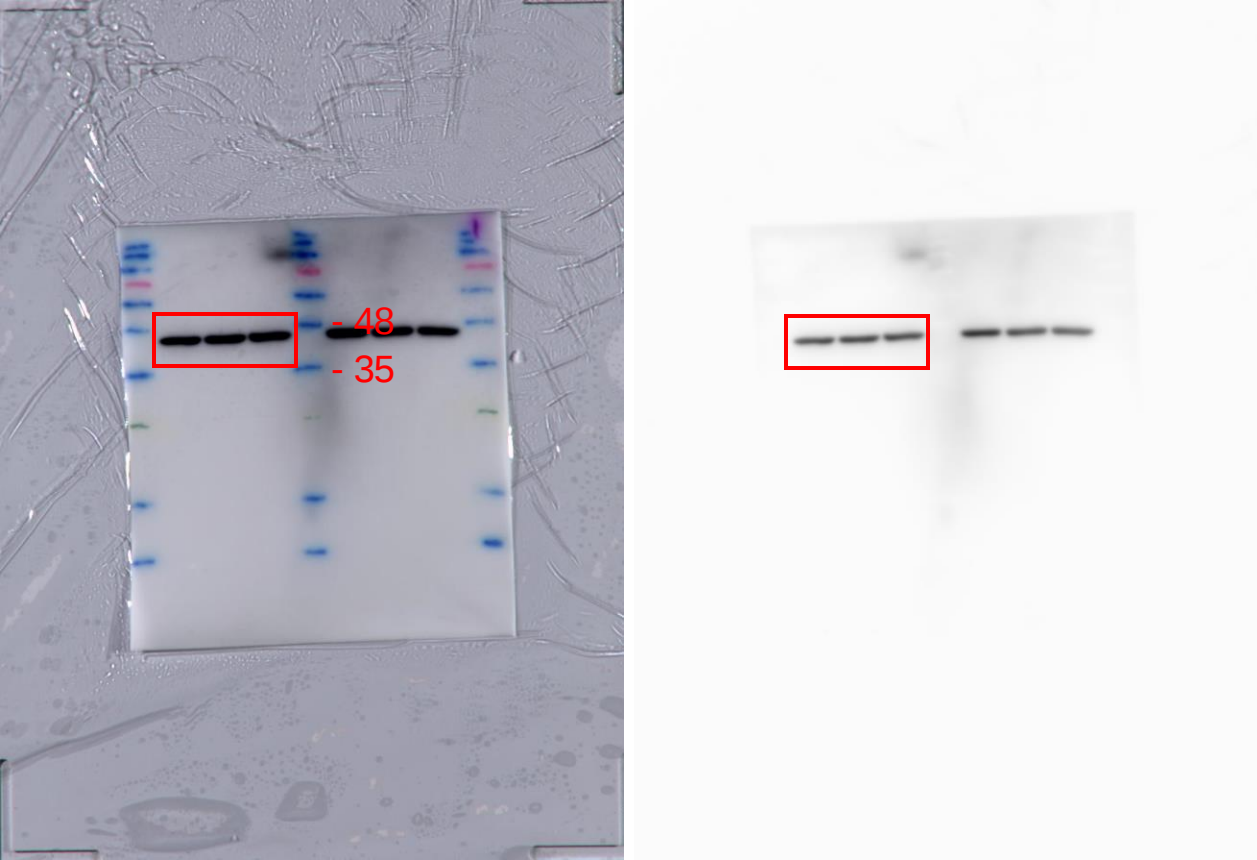


Fig. 3A

P-p65 NF- κ B

p65 NF- κ B

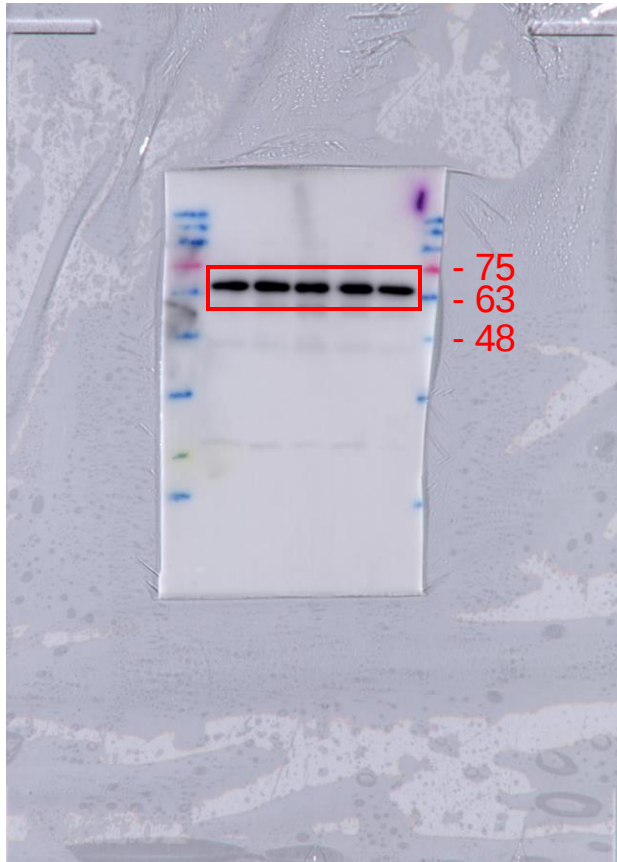
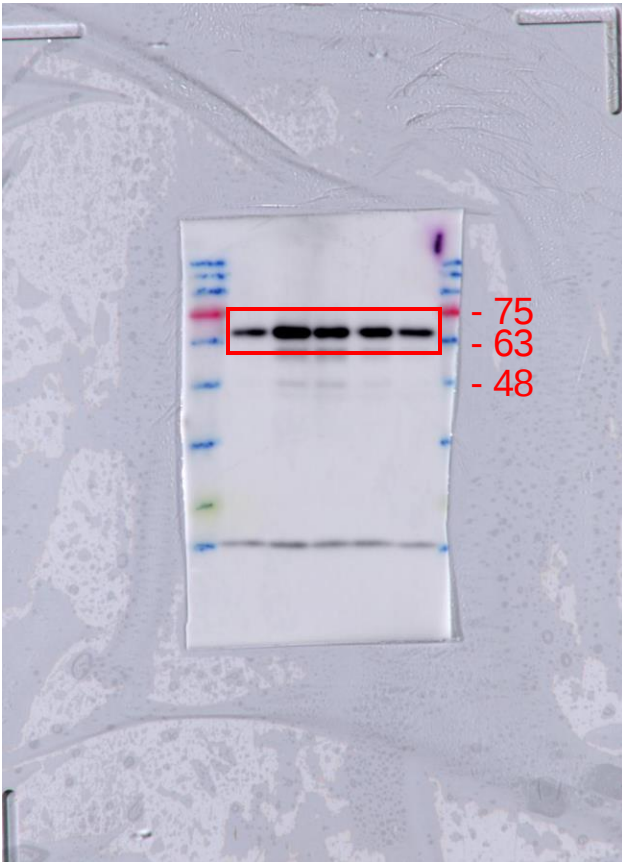


Fig. 3A

P-ERK

ERK

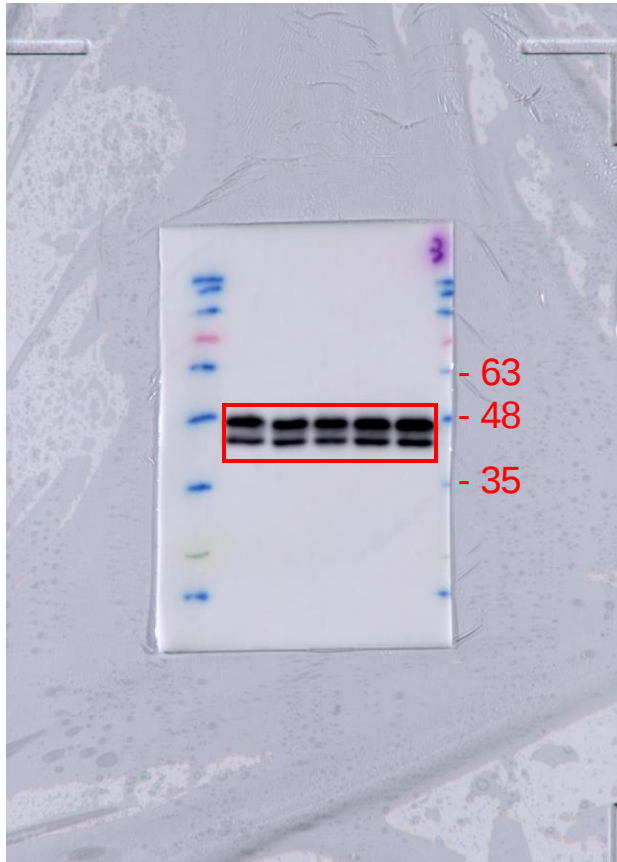
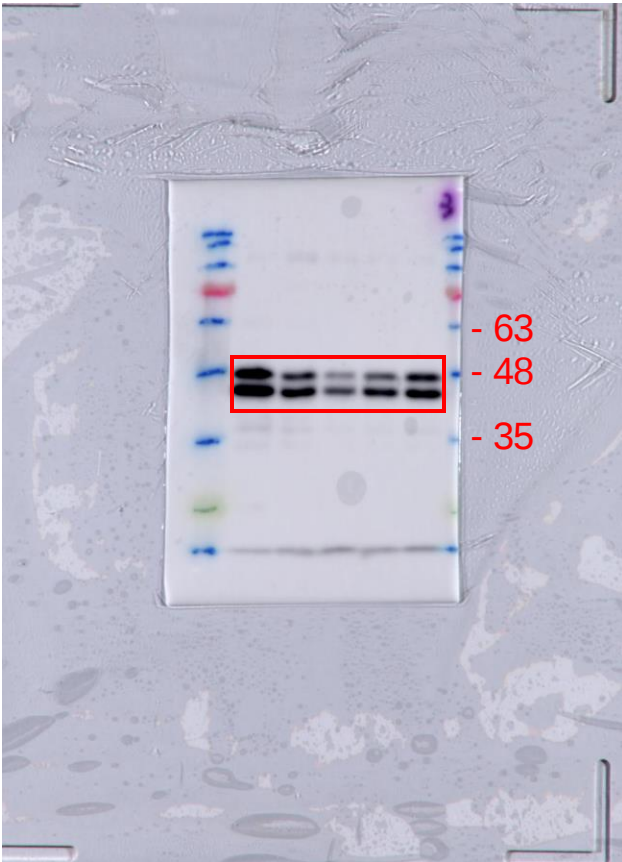


Fig. 3A

P-JNK

JNK

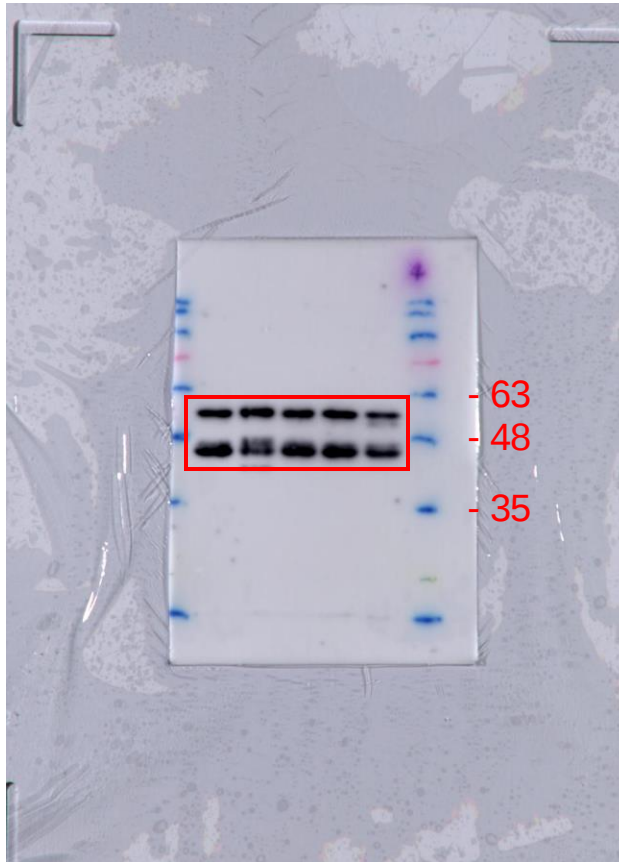
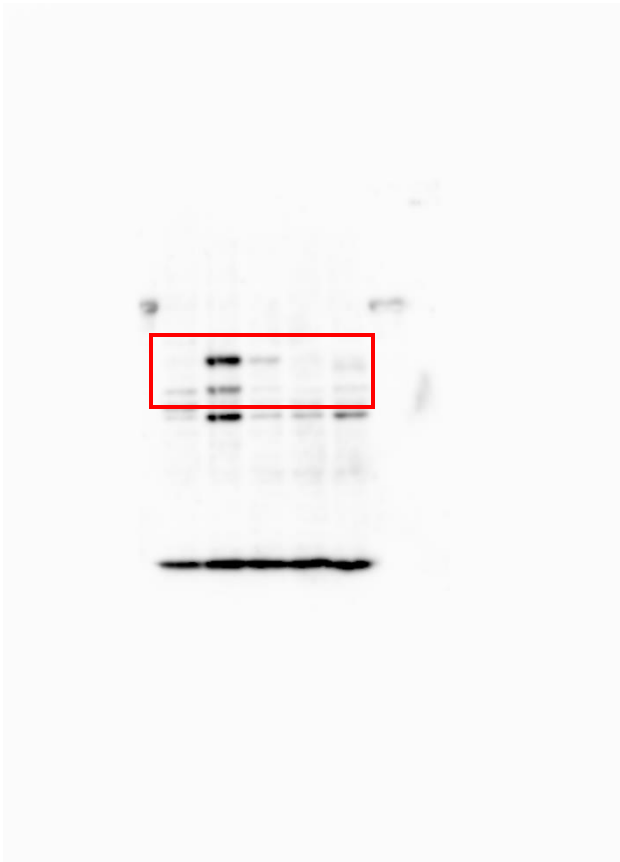
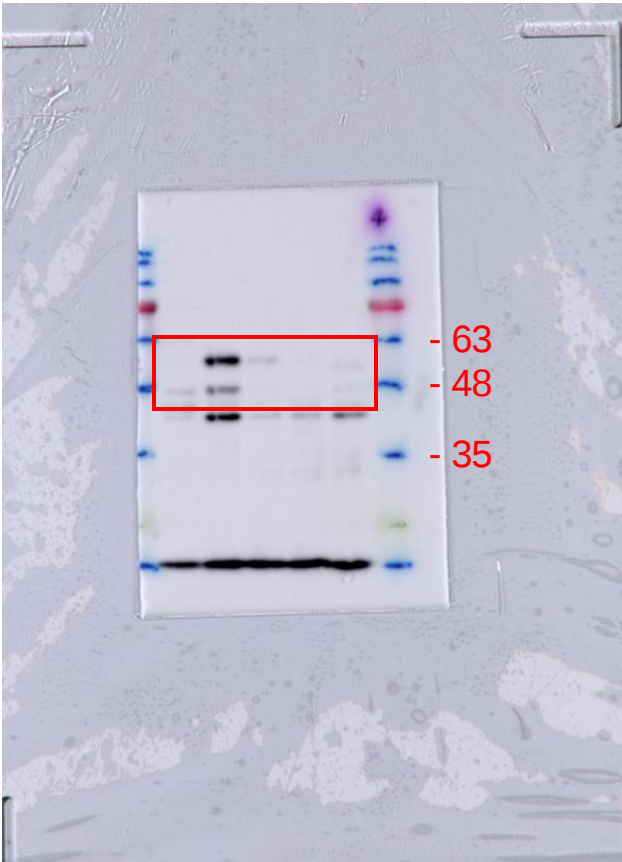


Fig. 3A

P-p38 MAPK

p38 MAPK

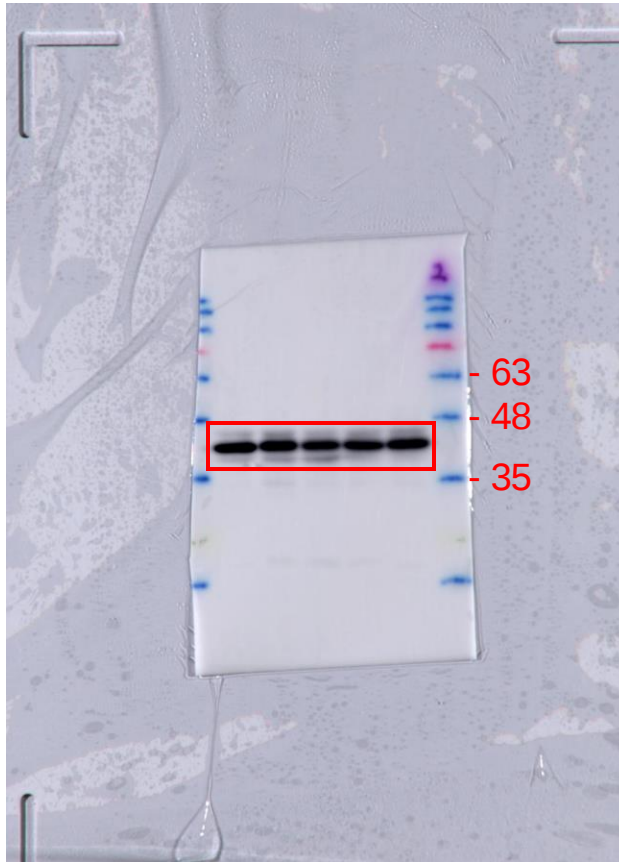
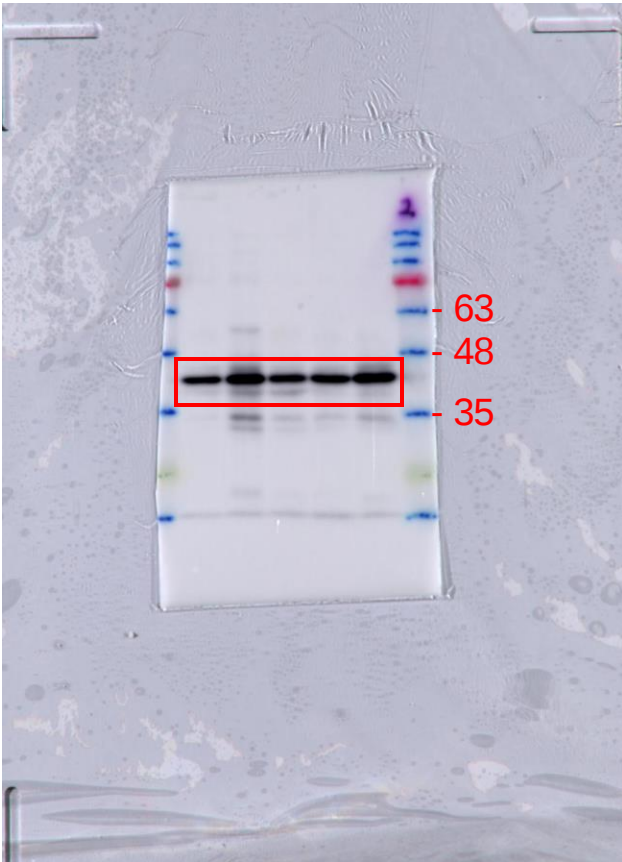


Fig. 3A

β -actin

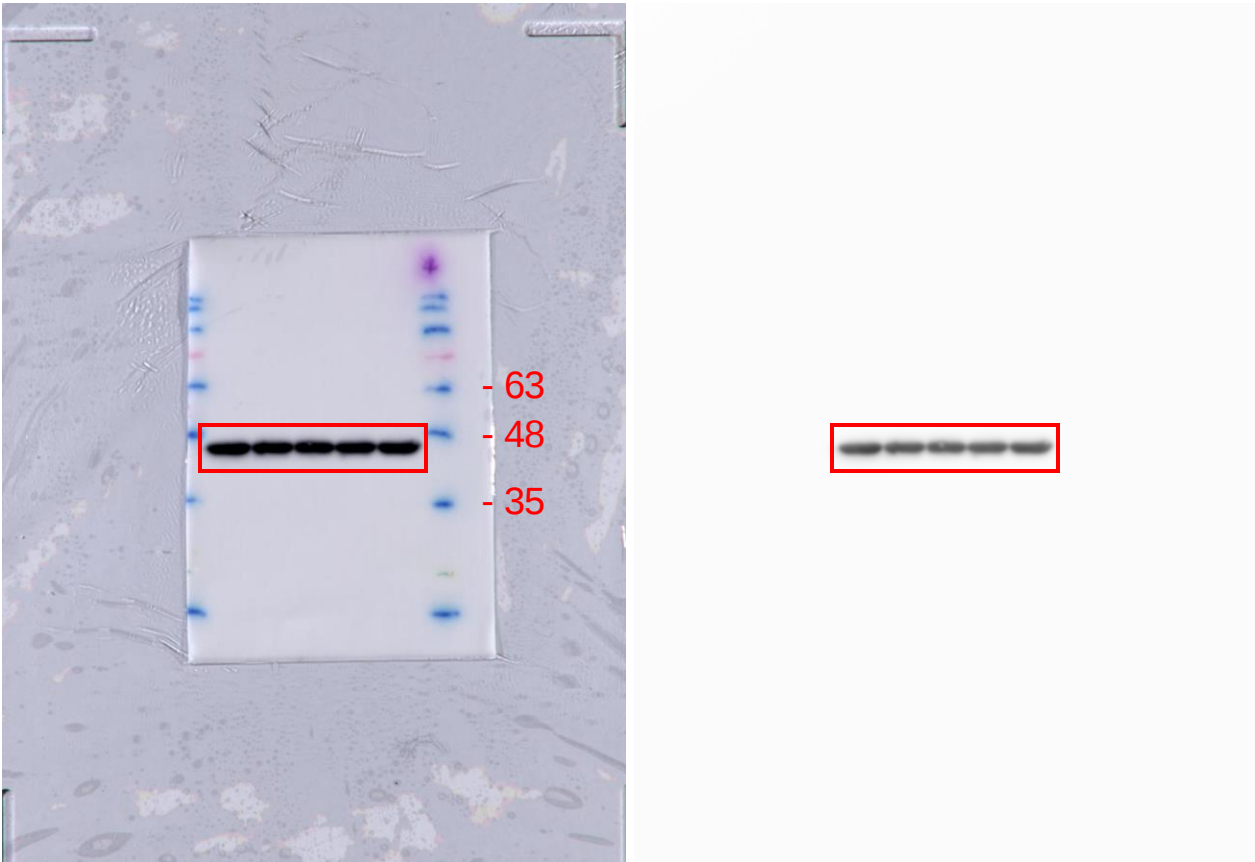
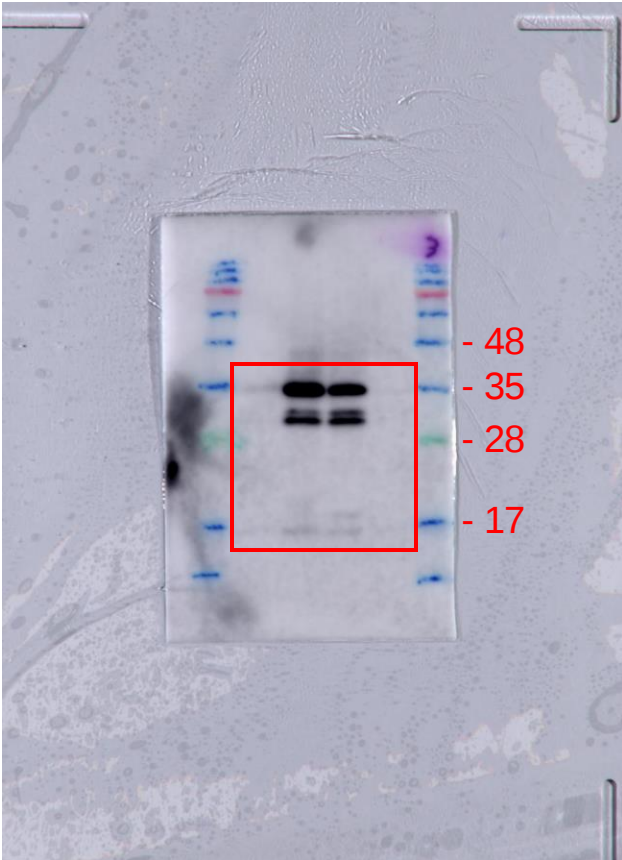


Fig. 4A

pro-IL-1 β



mature IL-1 β

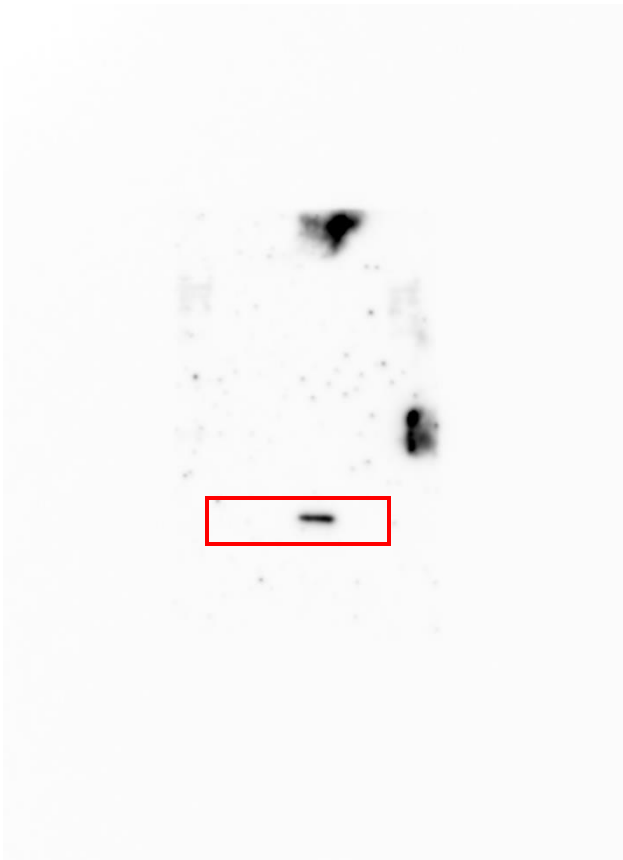
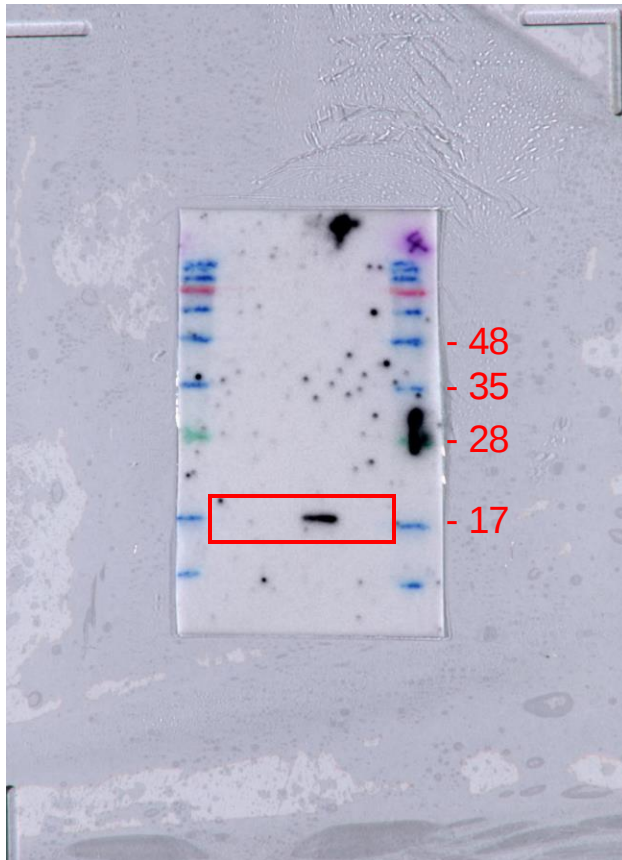


Fig. 4A

β -actin

