

STAT3 Undergoes Acetylation-dependent Mitochondrial Translocation to Regulate Pyruvate Metabolism

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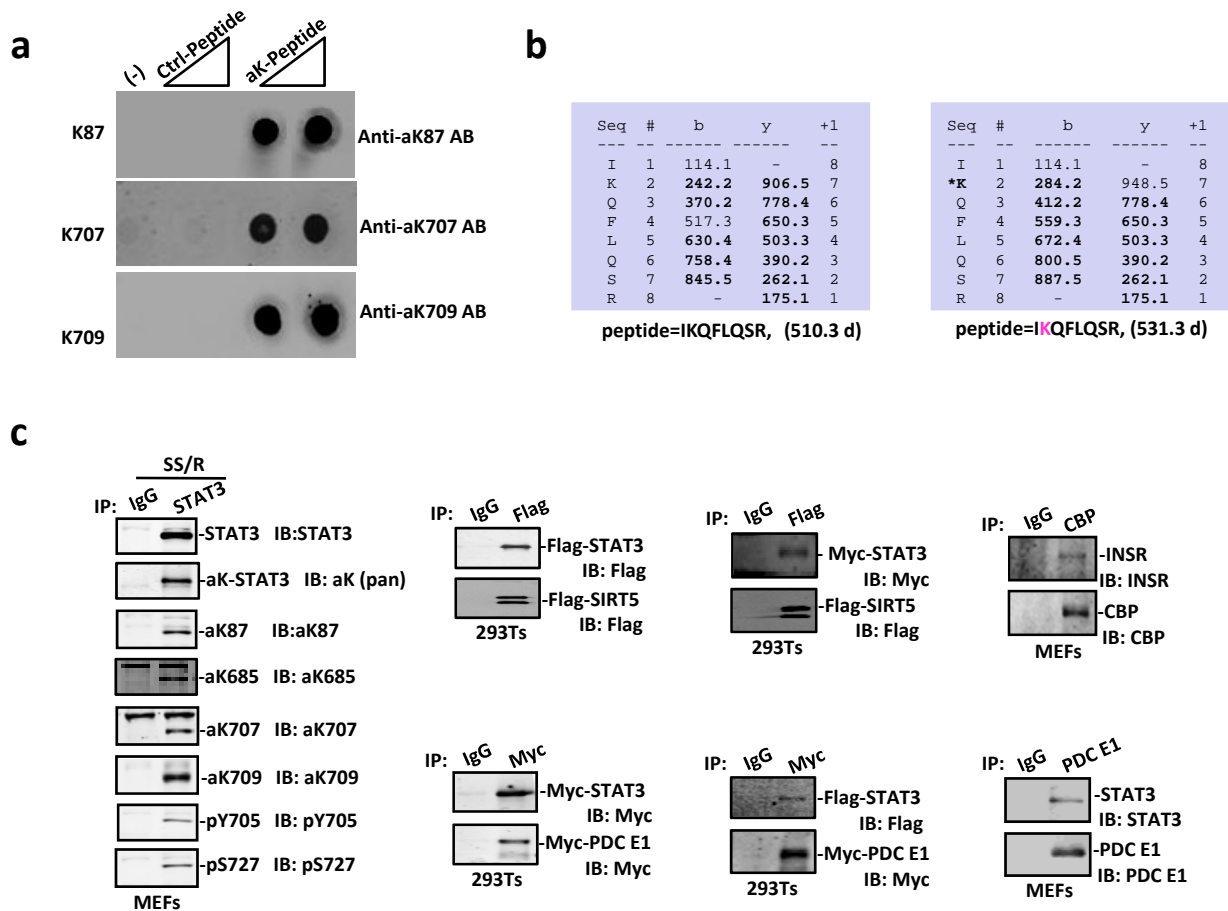


Figure S1. (a) Peptide slot blot analysis of the antibodies prepared for STAT3 acetylation on K87, K707 and K709. (b) y and b numbers of the mass spectrum in Fig. 2b. (c) IgG controls were detected for Immunoprecipitation and co-immunoprecipitation experiments involved in this text.

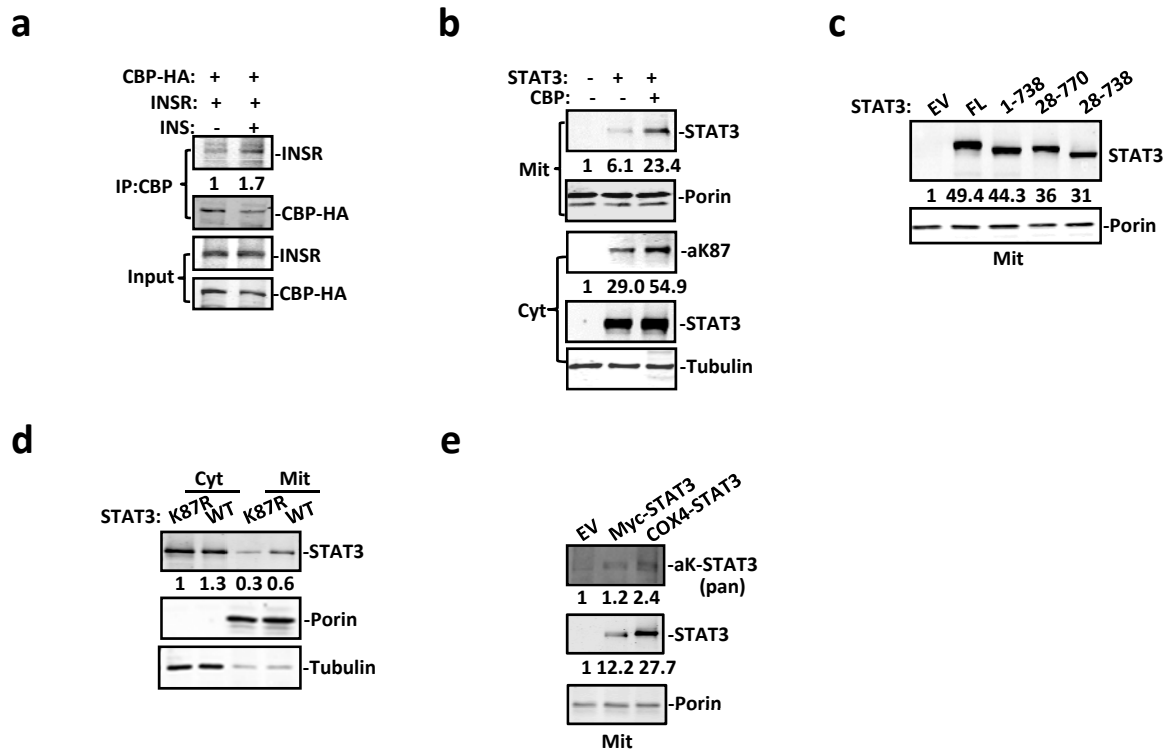


Figure S2. (a) INSR and CBP were overexpressed in 293T cells. HA-CBP was immunoprecipitated followed by Western blotting analysis with anti-INSR and anti-HA. The bottom panel gave the input of INSR and HA-CBP. (b) 293T cells were transfected with EV, STAT3, or STAT3 and CBP. STAT3 acetylation on lysine 87 was detected with a specific antibody via Western blotting. (c) 293T cells were transfected with EV, wild-type STAT3 and STAT3 with the N-terminus, C-terminus, or both N- and C-termini deleted (i.e., 1-738, 28-770, and 28-738). Mitochondria were isolated from the 293T transfectants and STAT3 and Porin levels were shown by Western blotting. (d) STAT3-K87R mutant or STAT3-WT was transiently transfected into 293T cells. Cytoplasmic and mitochondrial fractions were prepared for STAT3 localization analysis via Western blotting with anti-Myc. (e) Mitochondrial lysates were prepared for STAT3 acetylation analysis from 293T cells transfected with EV, STAT3 or Cox4-STAT3.

Figure S3. Full scans of western blotting data in all figures.

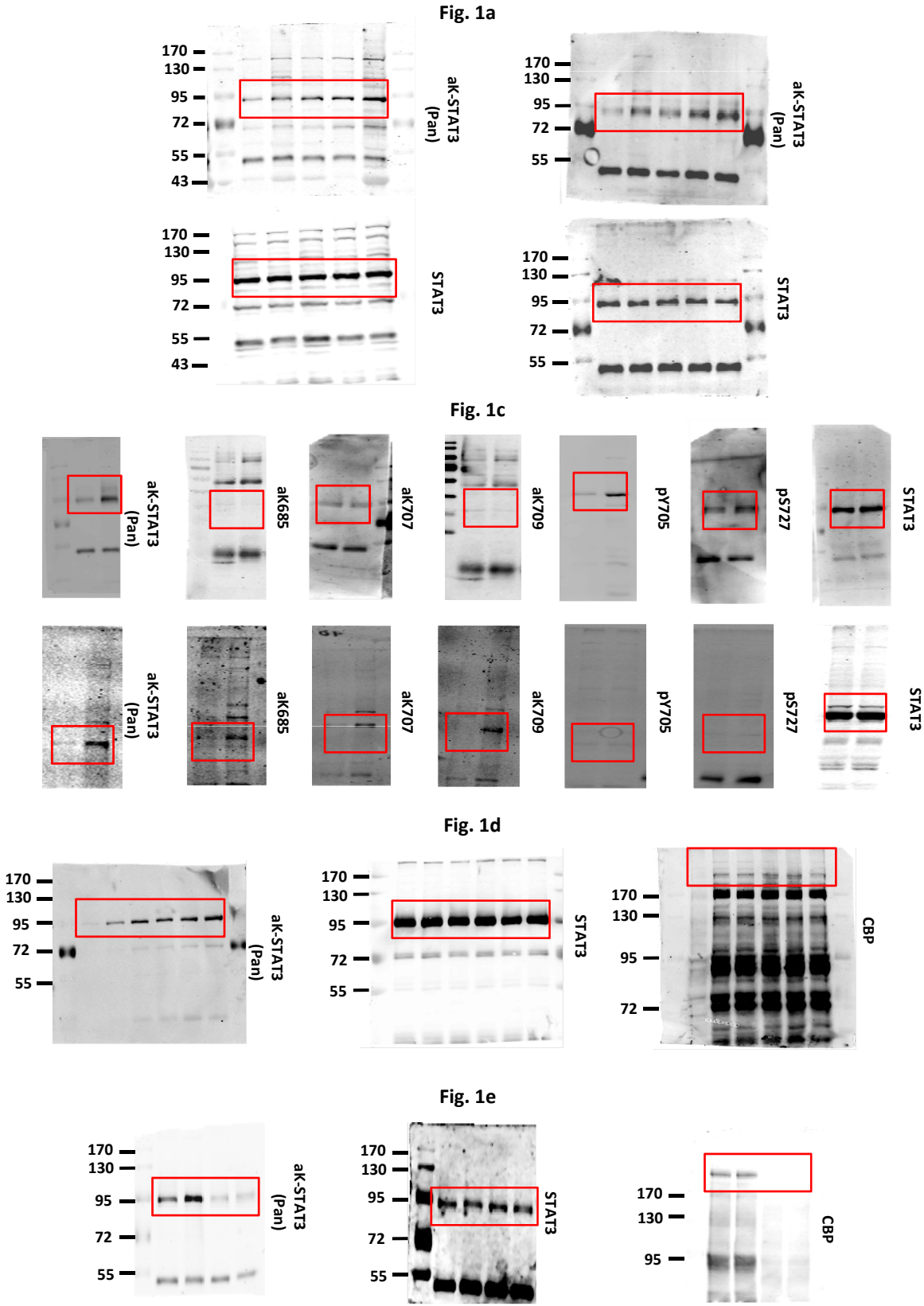


Fig. 1f

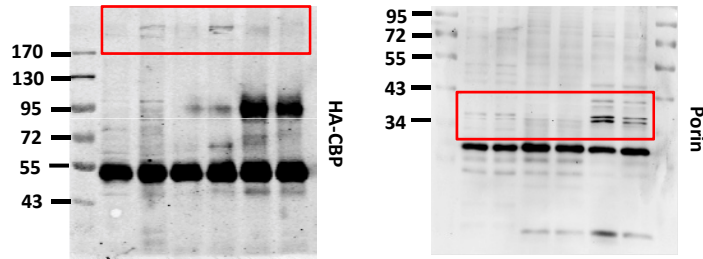


Fig. 1g

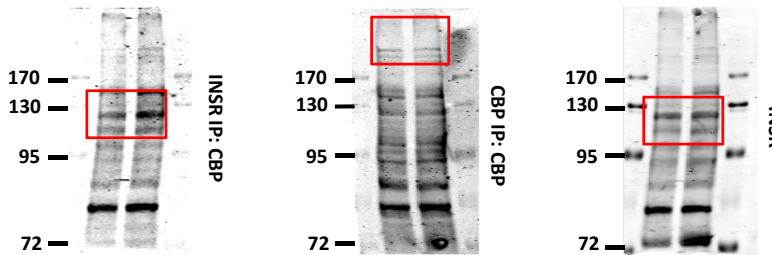


Fig. 1h

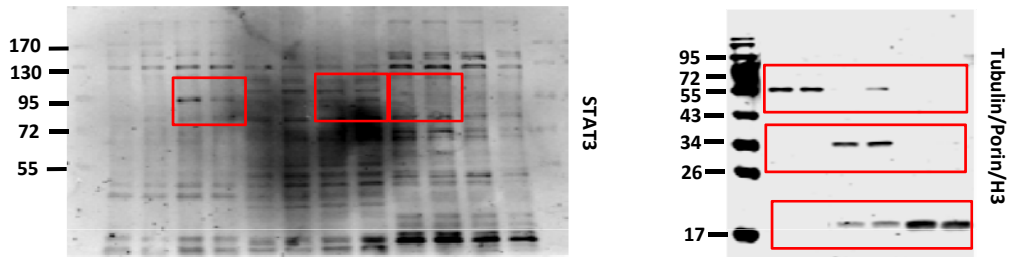


Fig. 2a

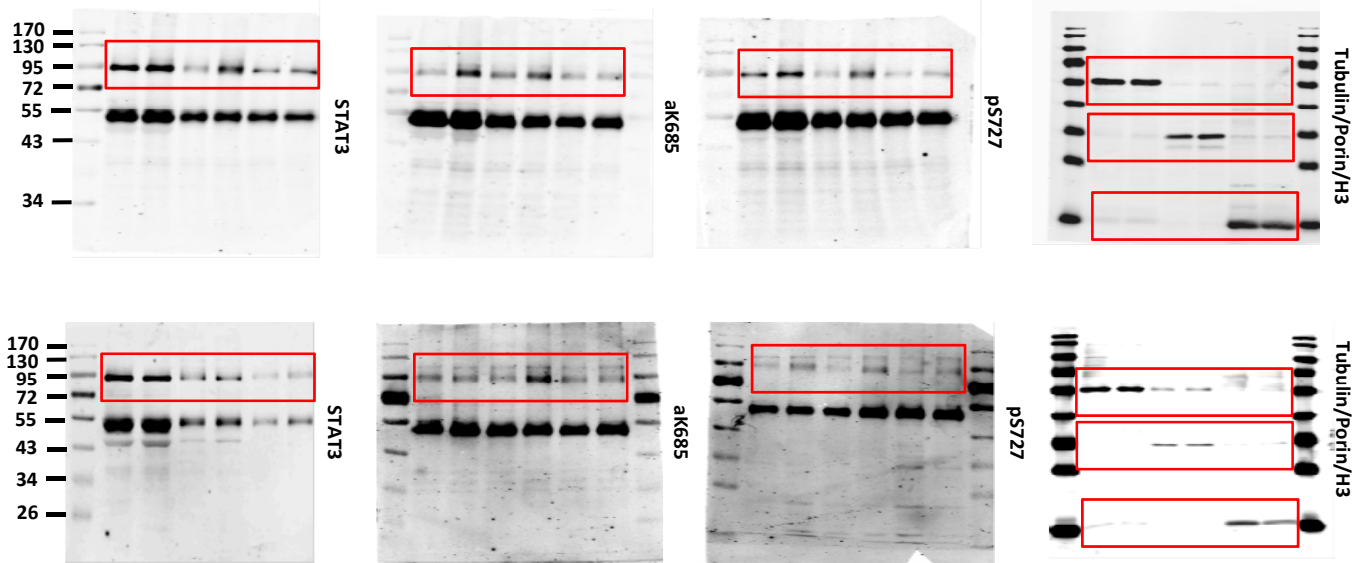


Fig. 2b

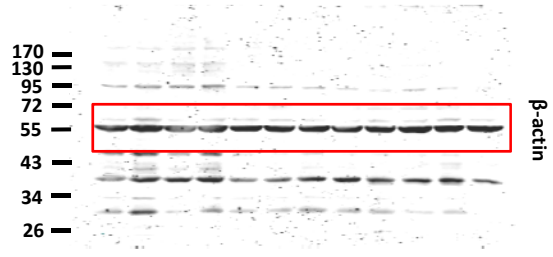
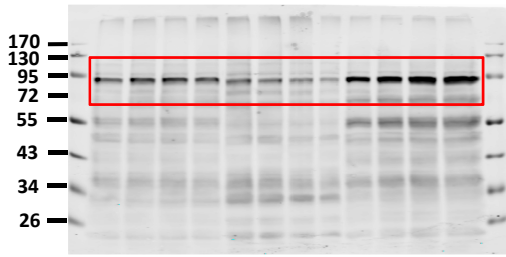


Fig. 2d

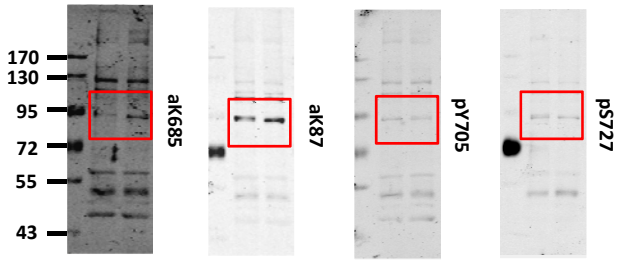


Fig. 2e

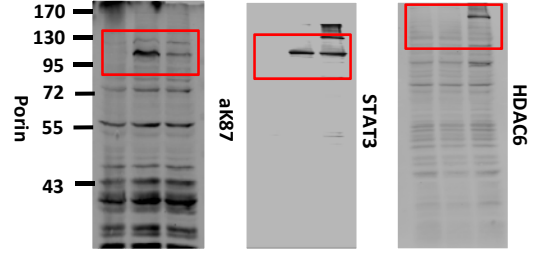


Fig. 2f

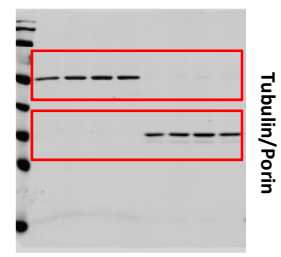
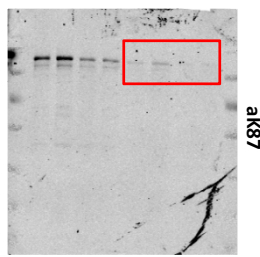
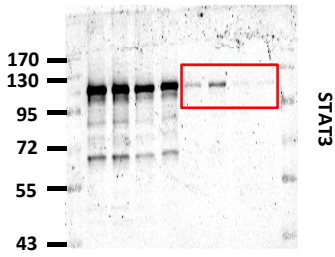


Fig. 2g

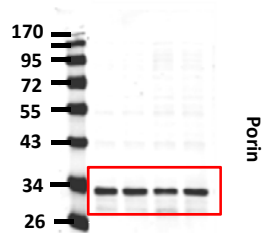
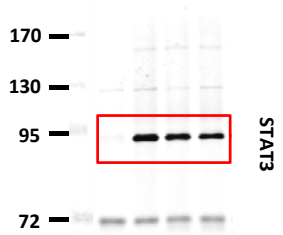


Fig. 2h

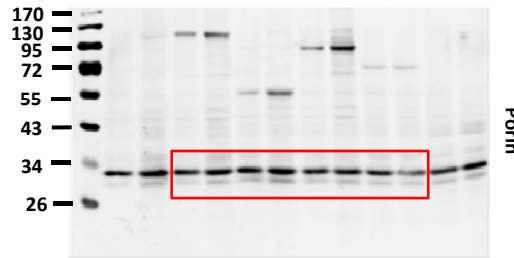
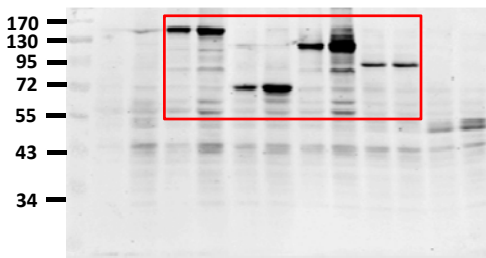


Fig. 2i

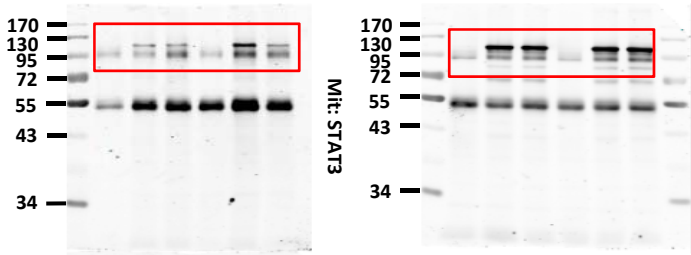


Fig. 2j

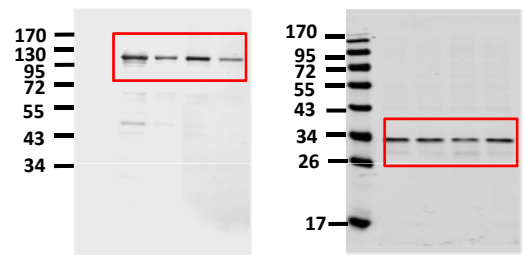


Fig. 3a

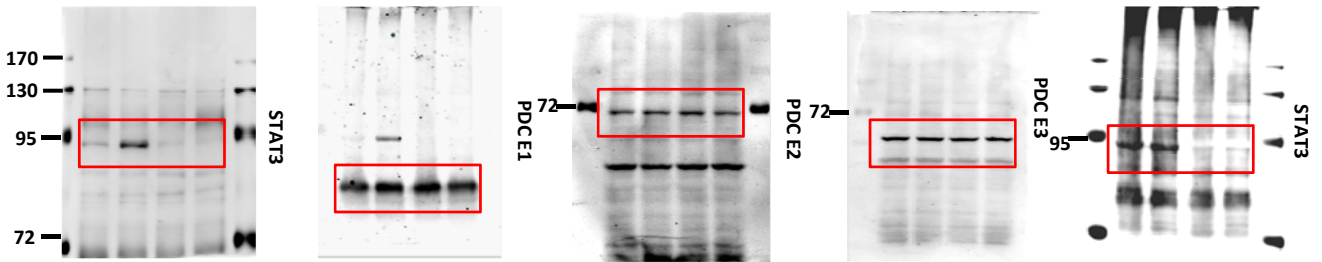


Fig. 3b

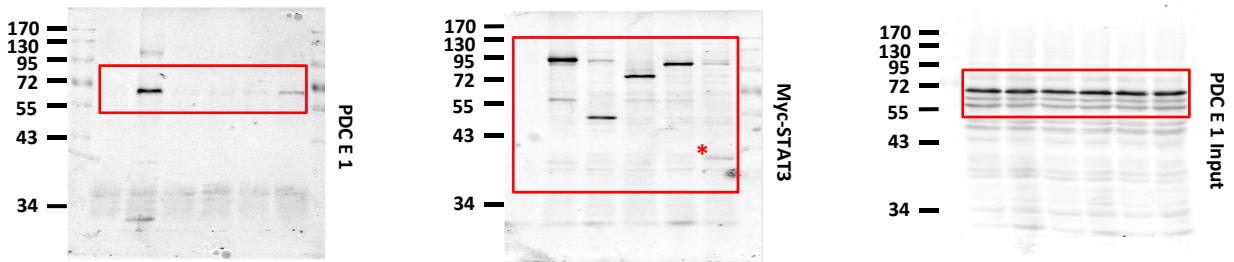


Fig. 3d

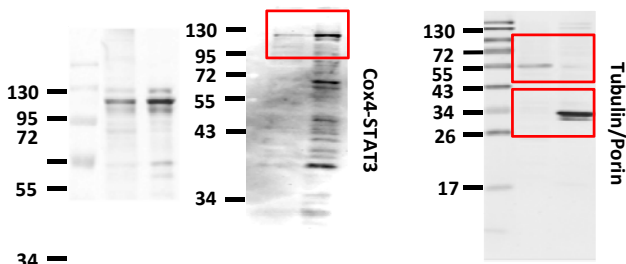


Fig. 3g

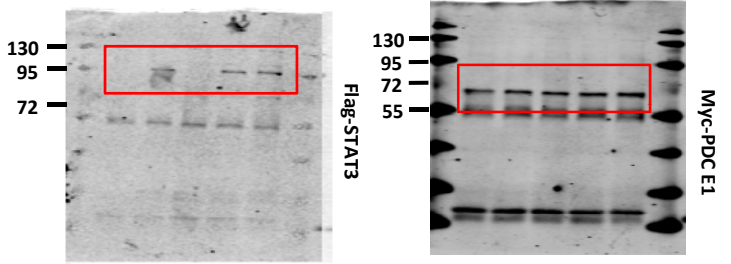


Fig. 4a

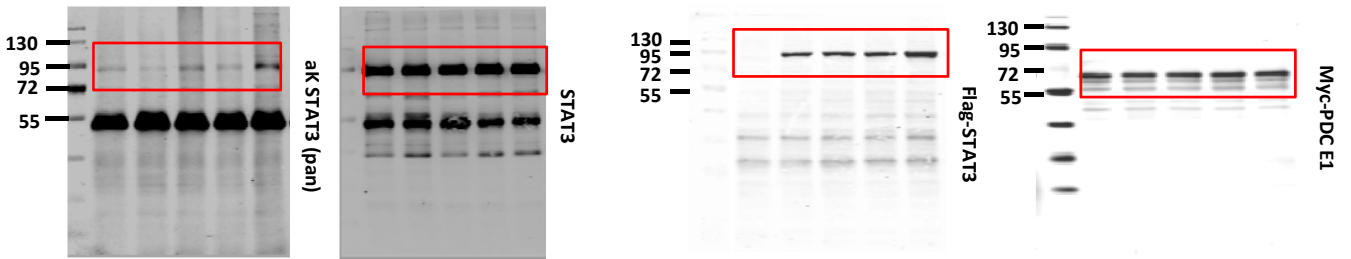


Fig. 4b

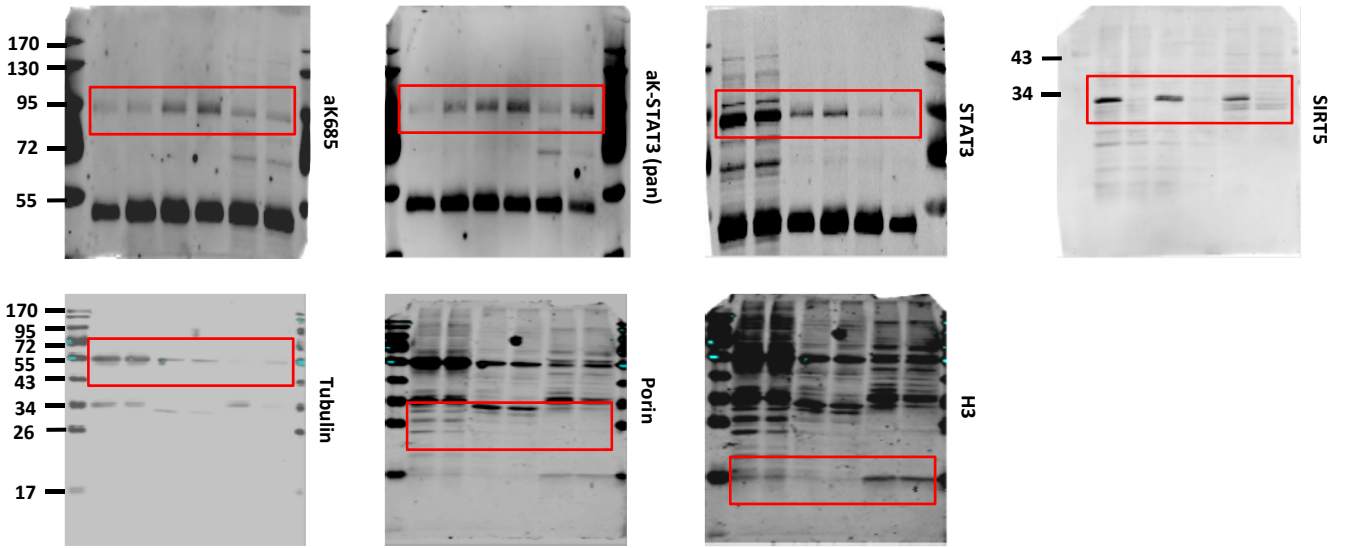


Fig. 4c

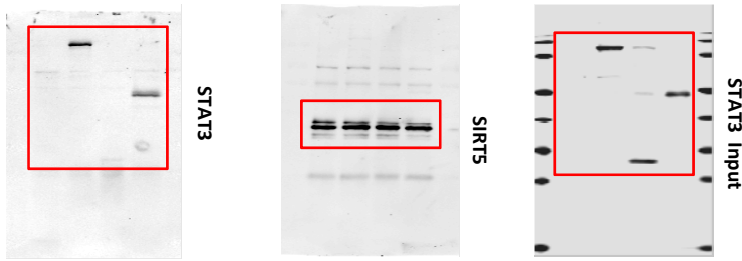


Fig. 4d

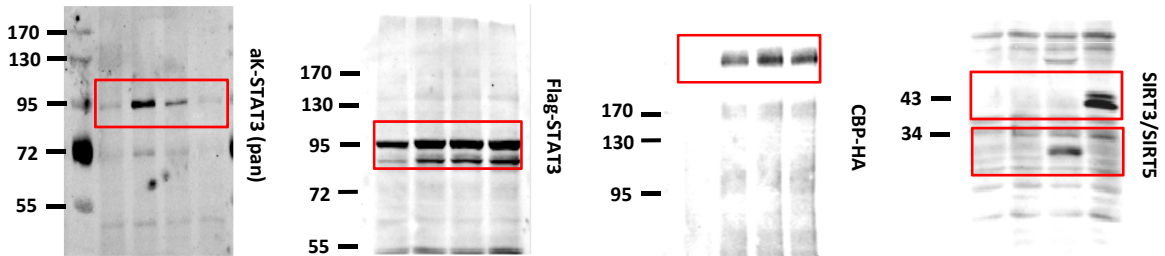


Fig. 4e

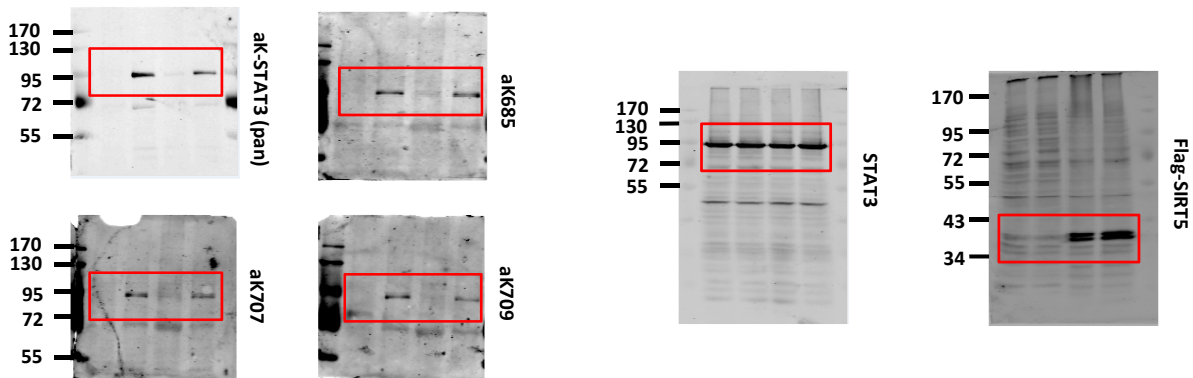


Fig. 4g

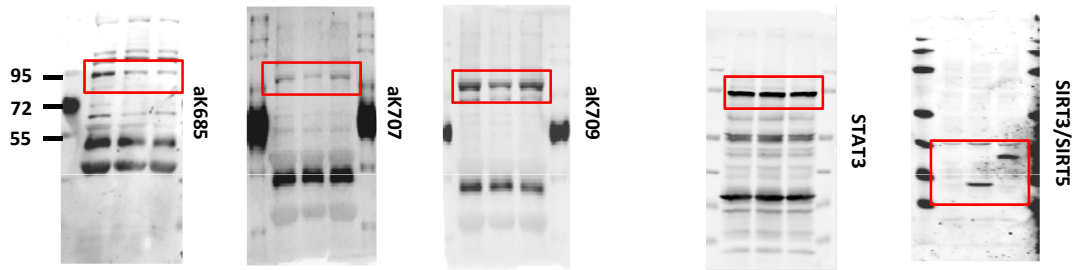


Fig. 7b

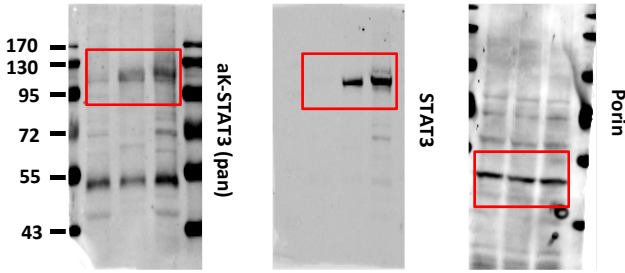


Fig. 7f

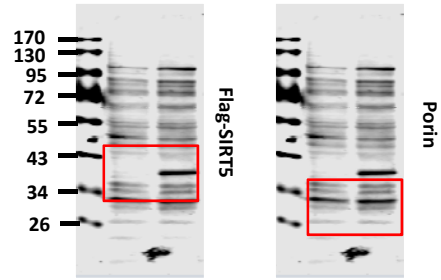


Fig. 7e

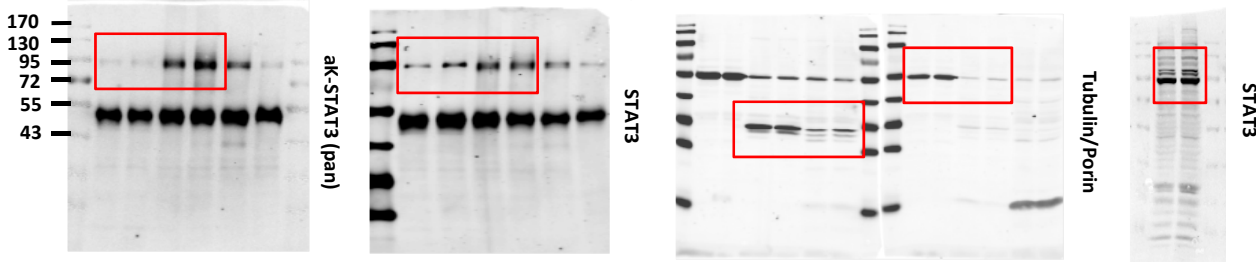
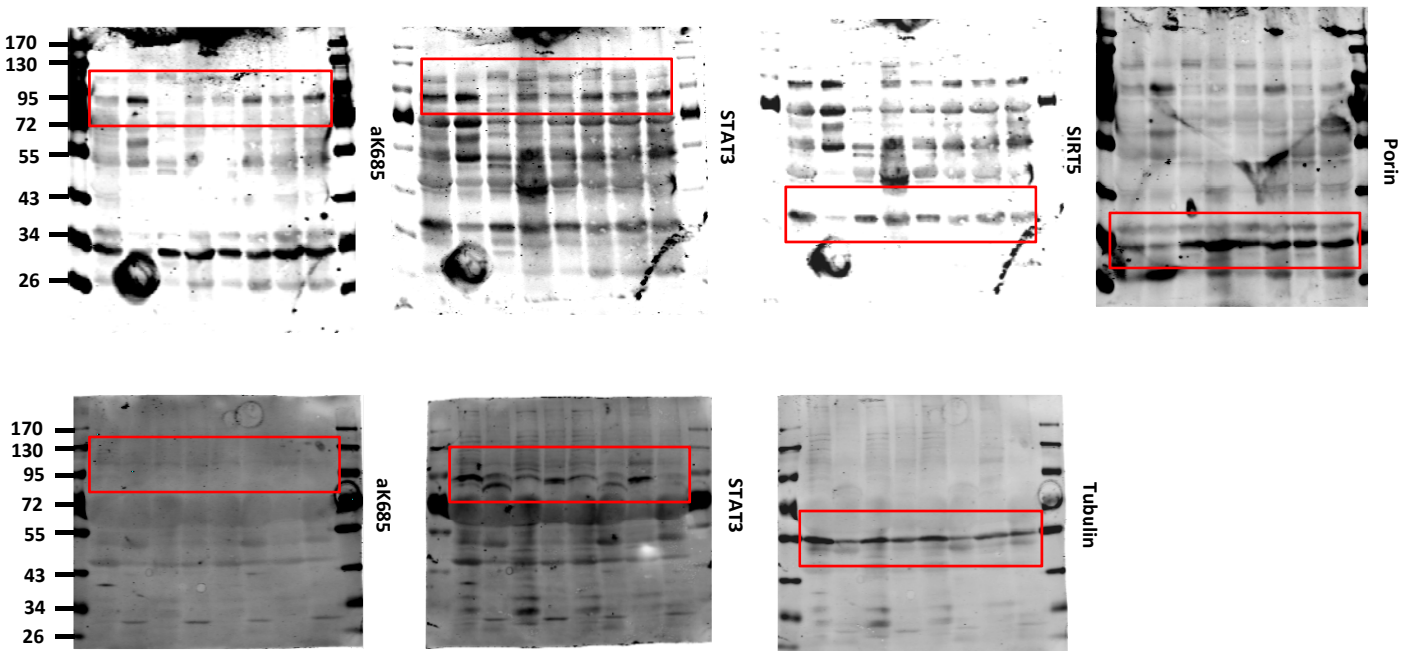
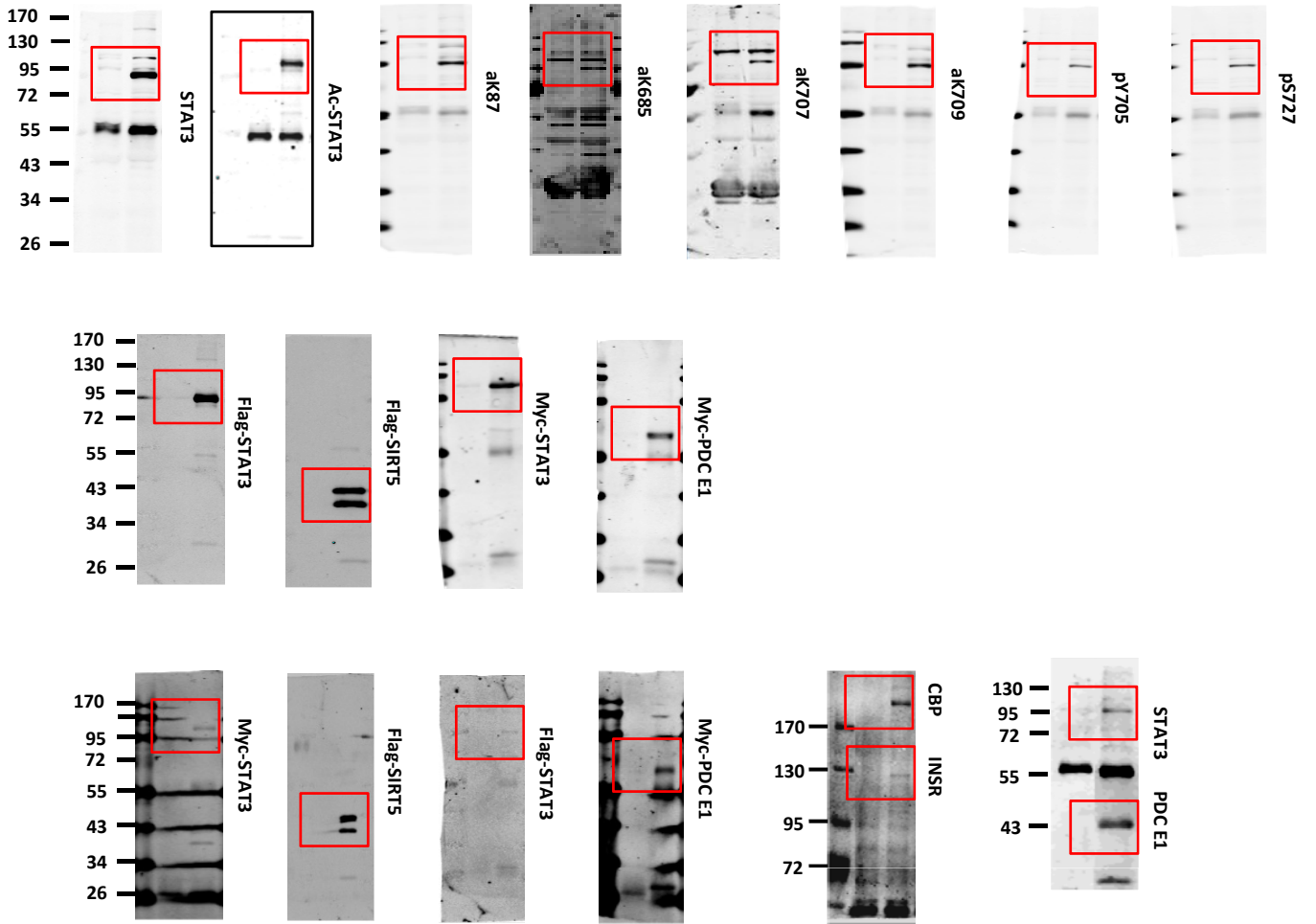


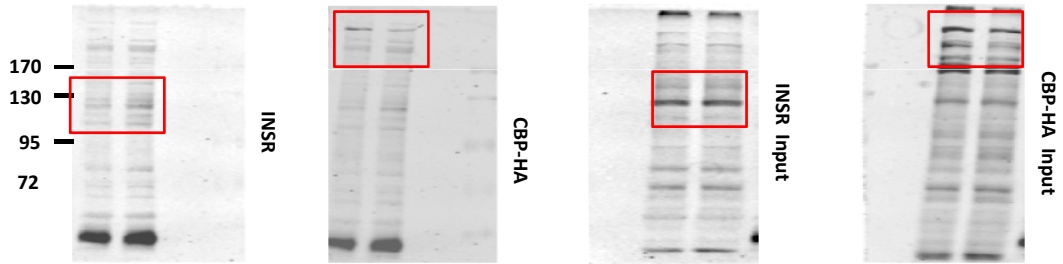
Fig. 7j



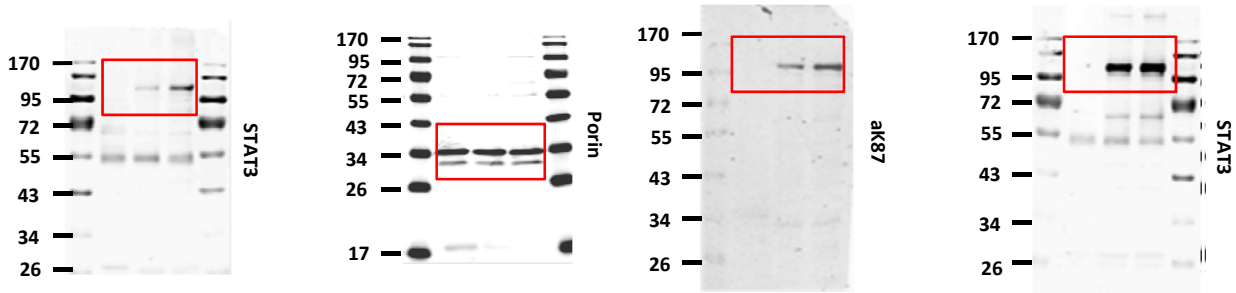
Supplementary Fig. 1c



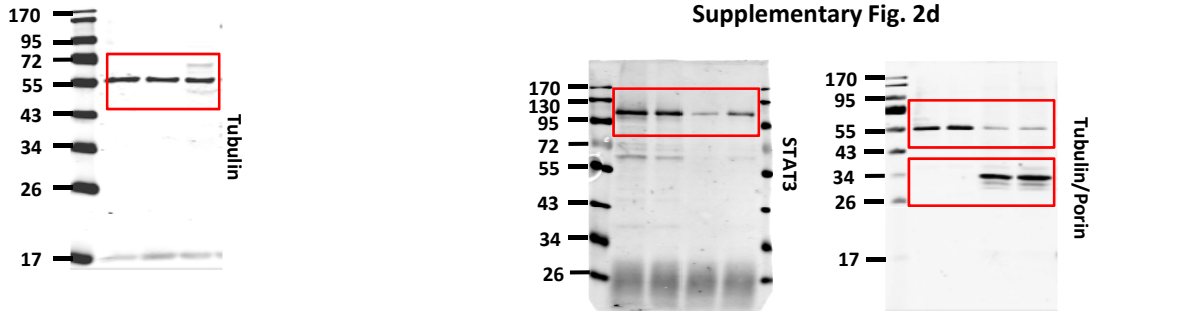
Supplementary Fig. 2a



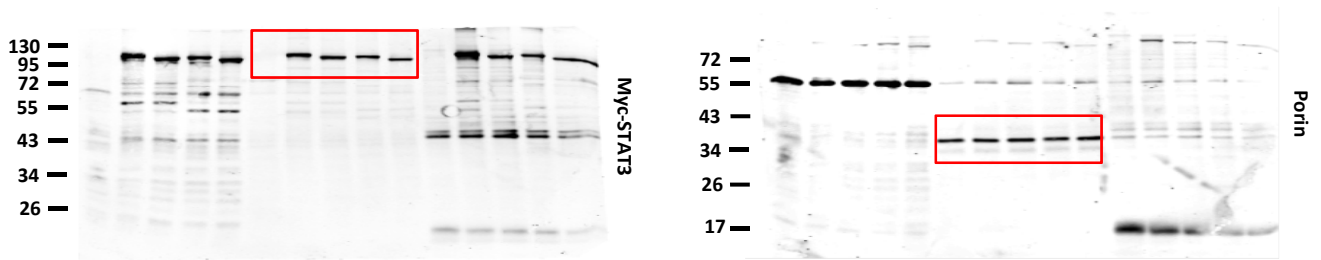
Supplementary Fig. 2b



Supplementary Fig. 2d



Supplementary Fig. 2c



Supplementary Fig. 2e

