

DUSP1 regulates apoptosis and cell migration, but not the JIP1-protected cytokine response, during Respiratory Syncytial Virus and Sendai Virus infection.

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Emmanuelle Brochiero^{1,4} and Nathalie Grandvaux^{1, 2 *}**

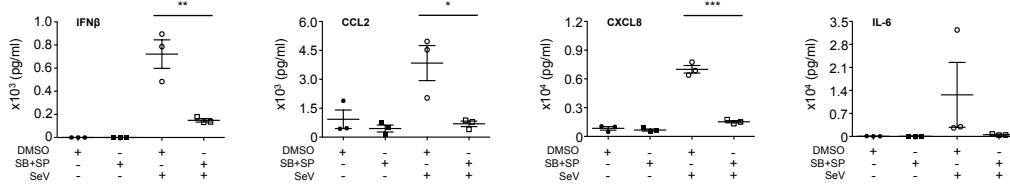
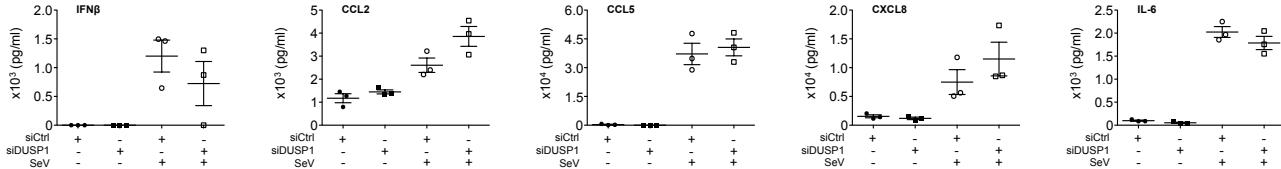
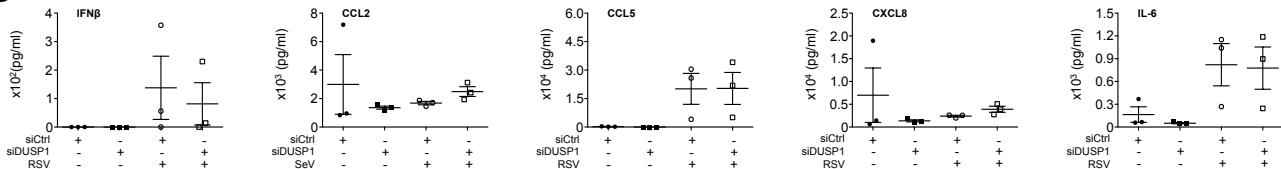
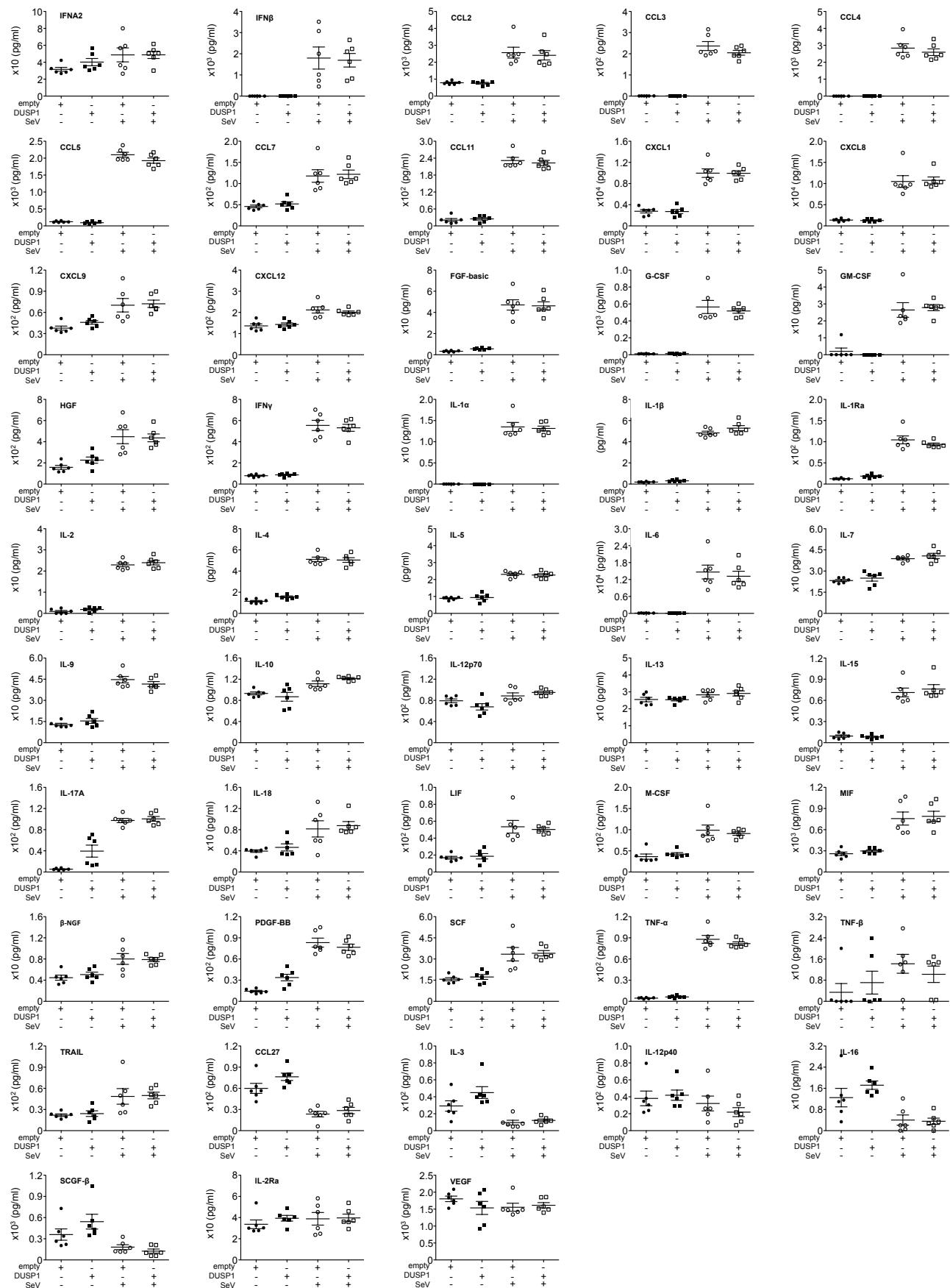
A**C****D**

Figure S1: Cytokine production elicited during SeV and RSV infection is protected from DUSP1-mediated inhibition of JNK and p38.

A549 cells were either **(A)** pre-treated with DMSO (vehicle) or SB203580 (10 μ M) + SP600125 (10 μ M) for 30 min prior to infection, **(B)** transfected with empty or DUSP1-expressing plasmids or **(C and D)** transfected with Control (Ctrl) or DUSP1-specific siRNA before infection with SeV at 40 HAU/ 10^6 cells **(A to C)** or RSV at MOI of 3 **(D)**. Release of cytokines measured in each biological replicates was quantified using Luminex-based multiplex assays. Data are represented as mean +/- SEM of n \geq 3 independent replicates and statistical analyzes were done using unpaired t-test. P<0.05 (*), P<0.01 (**), or P<0.001 (***)

B

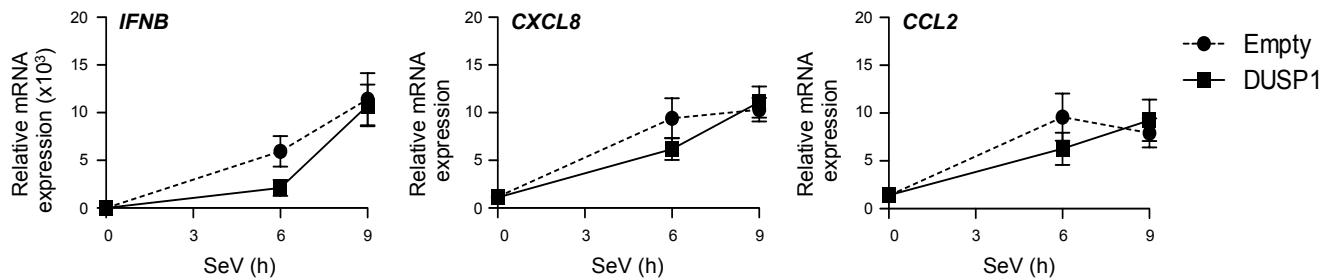


Figure S2: DUSP1 expression does not alter cytokines mRNA levels induced by SeV infection.

A549 cells were transfected with an empty- or DUSP1-expressing plasmid before infection with SeV at 5 HAU/10⁶ cells for the indicated times. IFNβ, CXCL8 and CCL2 mRNA levels were quantified by qRT-PCR. Data are represented as mean +/- SEM of n=3 independent experiments and analyzed using two-way ANOVA with Bonferroni's post-test.

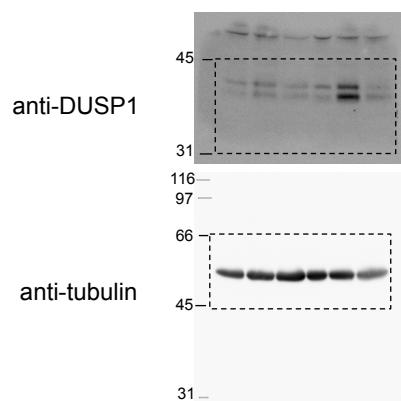
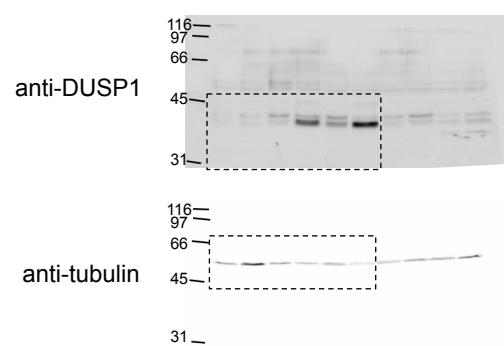
Fig. 1A**Fig. 1B****Figure S3: Full-length blots of Figure 1.**

Fig. 2A

Robitaille et al. Suppl. Figure 4

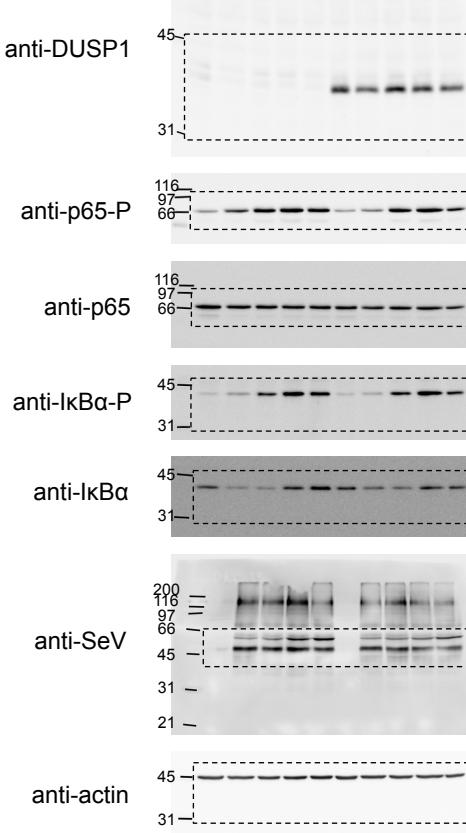
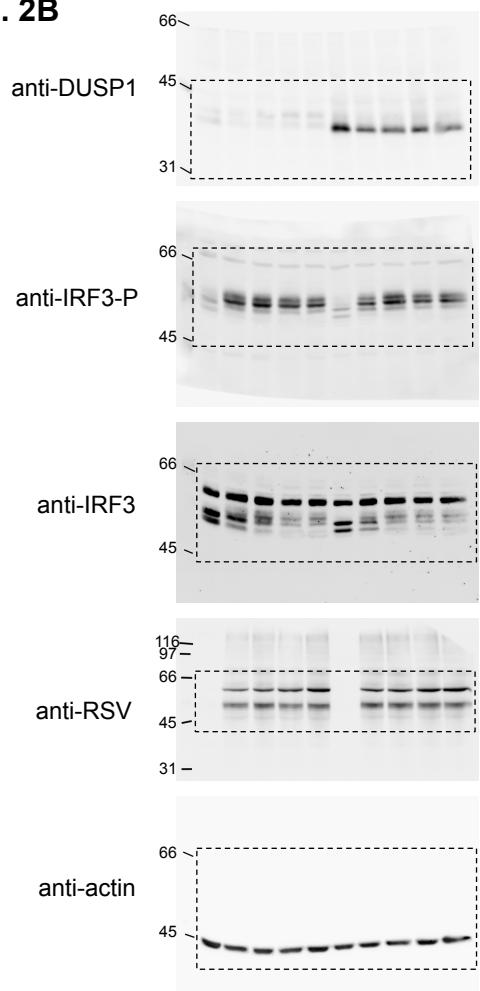
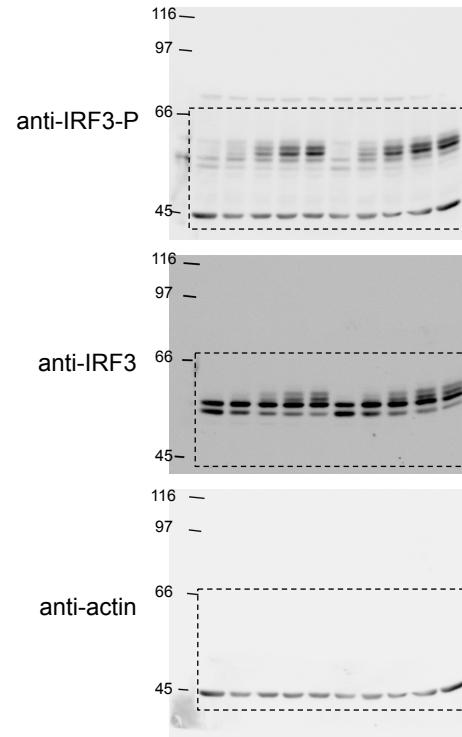
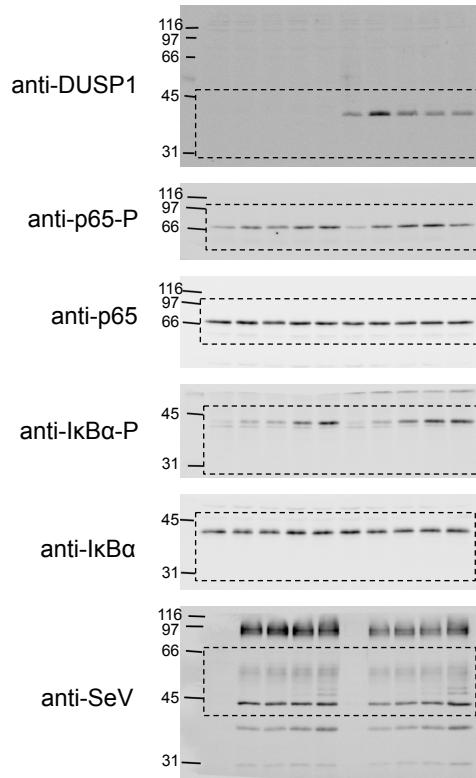
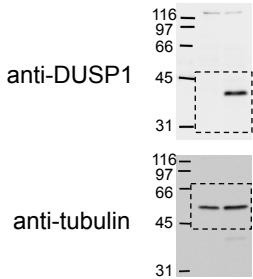
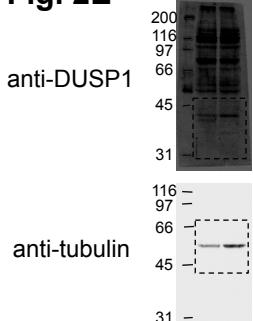
**Fig. 2B****Fig. 2C****Fig. 2D****Fig. 2E****Figure S4: Full-length blots of Figure 2.**

Fig. 3A

Robitaille et al. Suppl. Figure 5

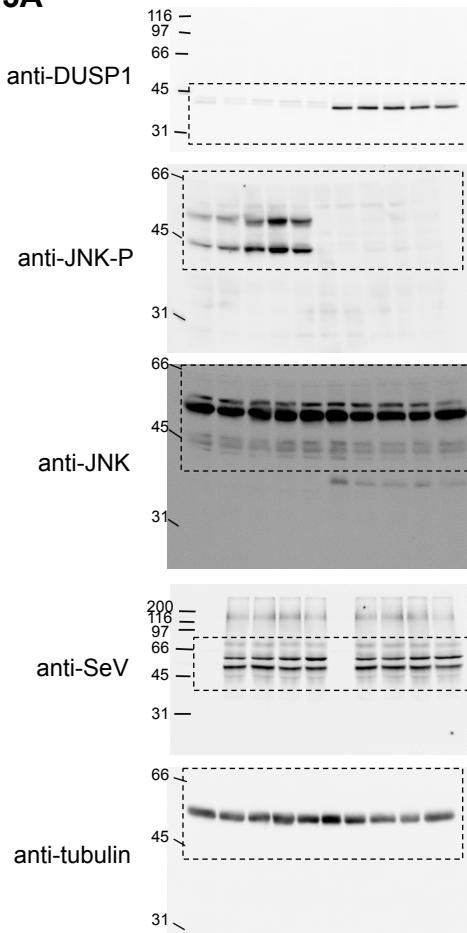
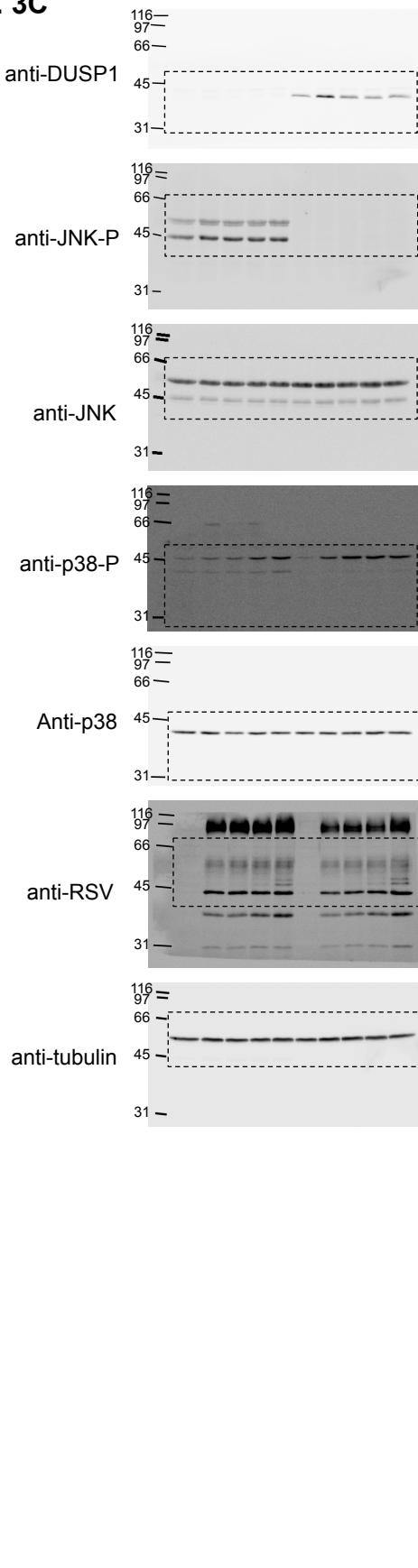
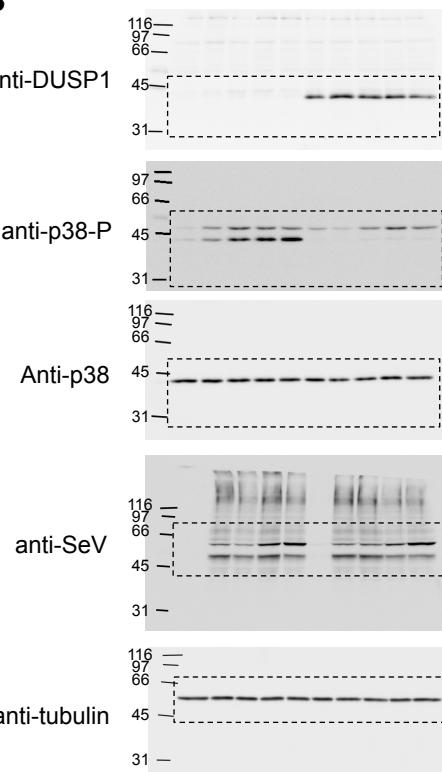
**Fig. 3C****Fig. 3B****Figure S5: Full-length blots of Figure 3.**

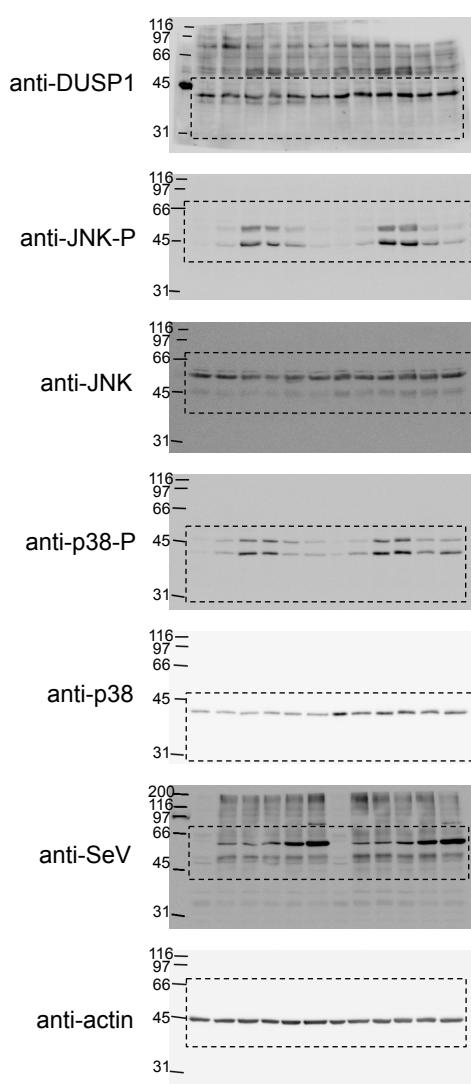
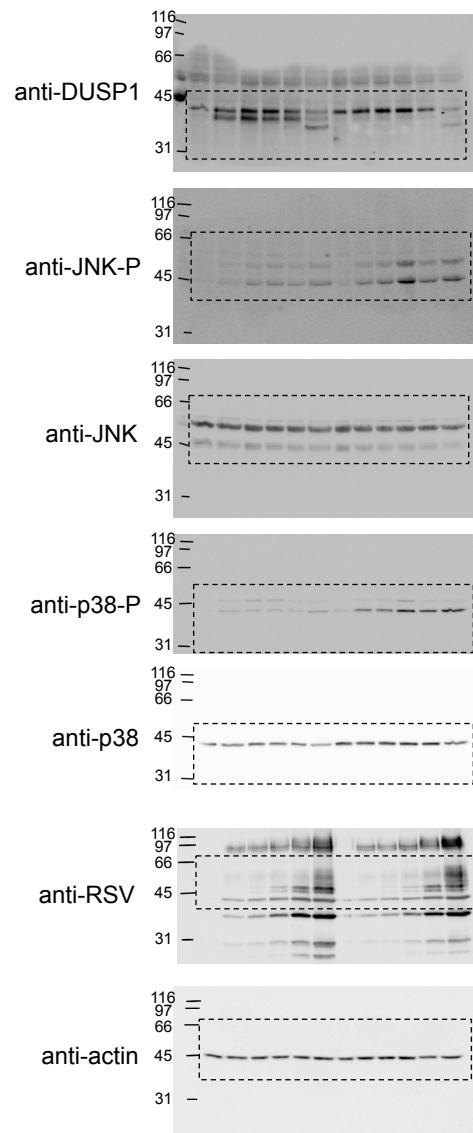
Fig. 4A**Fig. 4B****Figure S6 Full-length blots of Figure 4.**

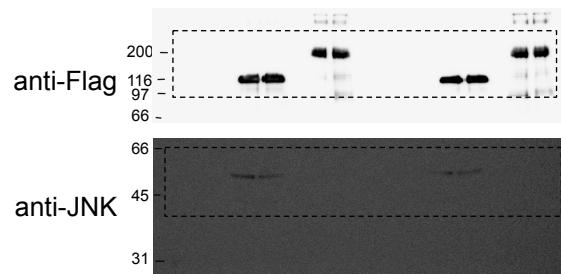
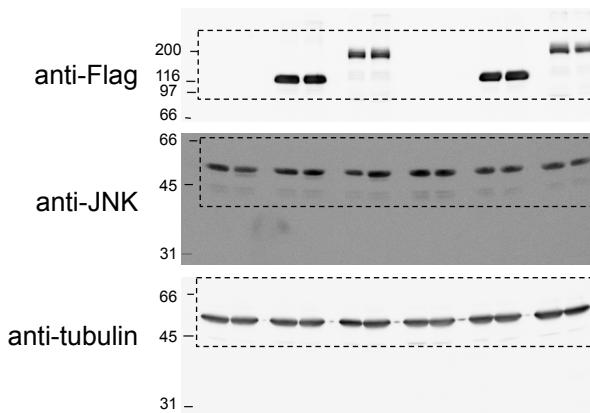
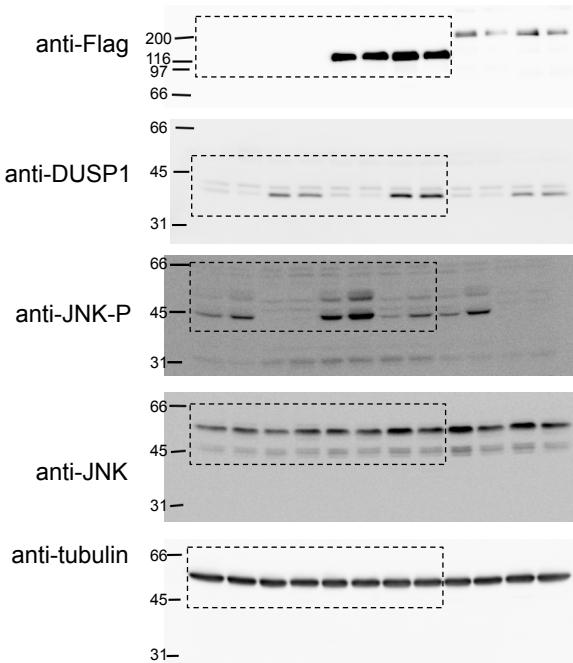
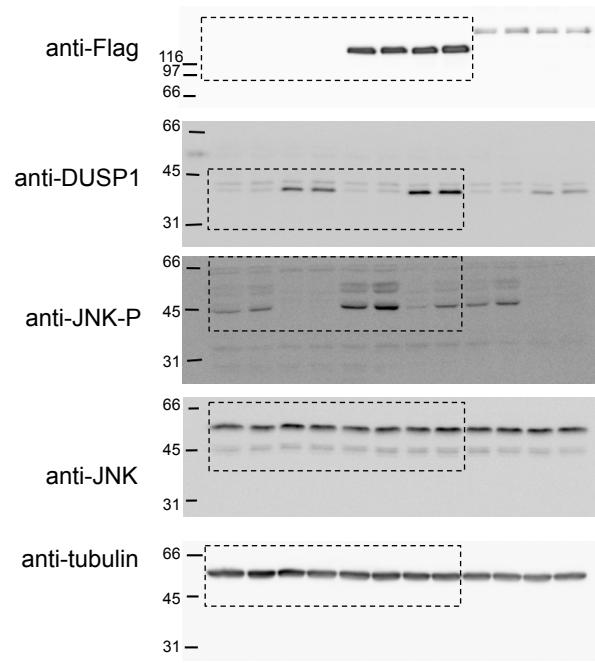
Fig. 5A**Fig. 5B****Fig. 5C****Figure S7: Full-length blots of Figure 5.**

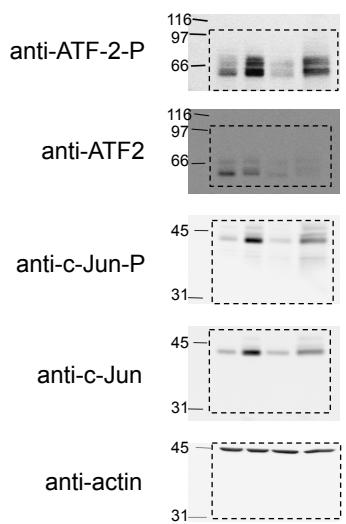
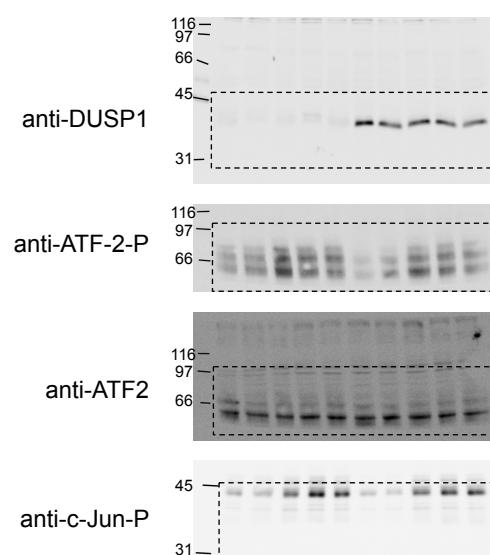
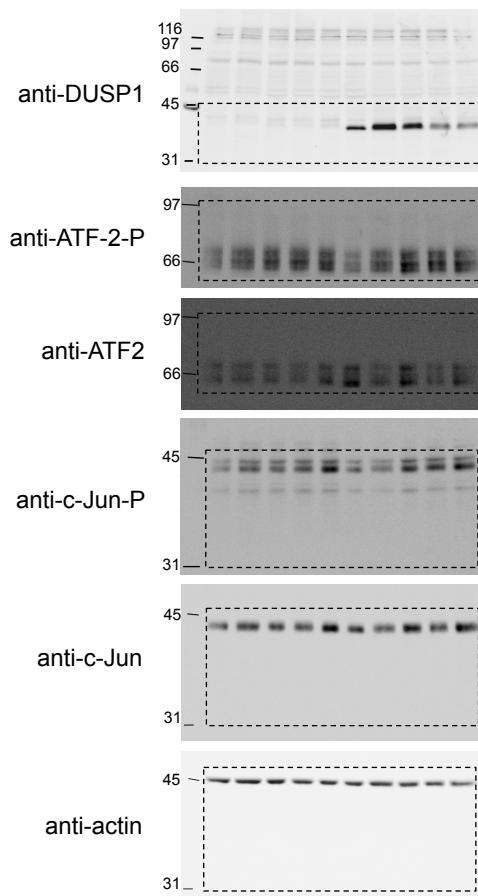
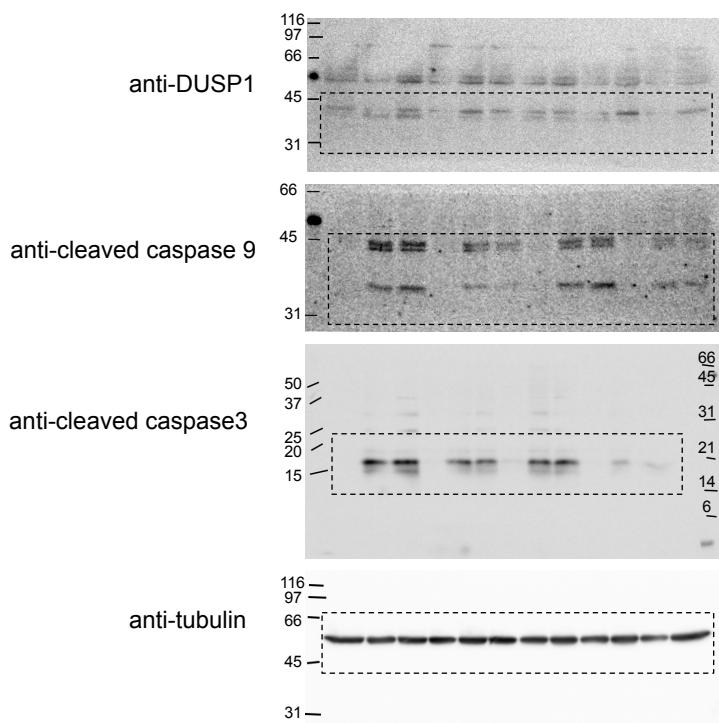
Fig. 6A**Fig. 6B****Fig. 6C****Figure S8: Full-length blots of Figure 6.**

Fig. 7**Figure S9: Full-length blots of Figure 7.**

SUPPLEMENTARY INFORMATION

MATERIALS AND METHODS

qRT-PCR

Specific mRNA levels were quantified by qRT-PCR as described in the Material and Methods using either Fast start SYBR Green Kit (Roche) for *IFNB* (S: gaacttgacatccctgaggagattaaggcagc, AS: gttccttaggatttccactctgactatggcc) and *IL8* (S: tctcttggcagccctcctgatttc, AS: gtgtggccactctcaatcactct) or using TaqMan Gene Expression Assays (Applied biosystems) for *CCL2* (#Hs00234140_m1). Results were analyzed by the $\Delta\Delta CT$ method after normalization to S9 mRNA levels (S: cgtctcgaccaagagctga, AS: ggtccctctcatcaagcgtc) or S9 (Hs02339424_g1) for *CCL2*.