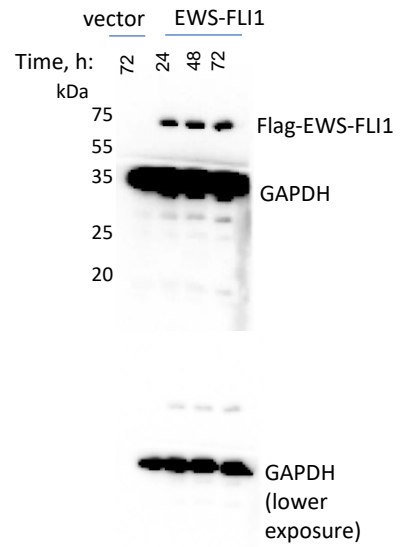
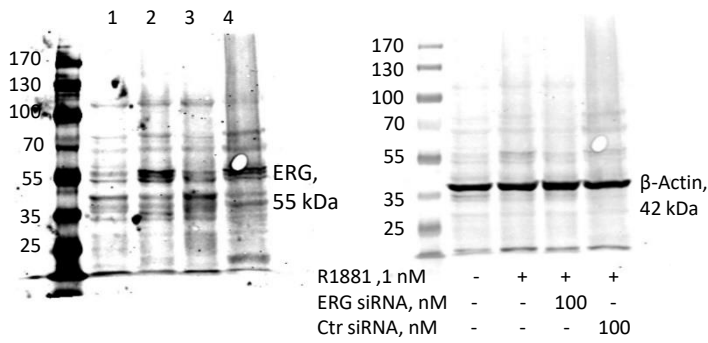


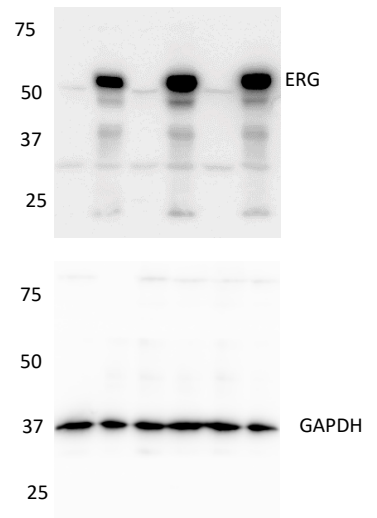
**Full-size unedited gel for Figure 1A**



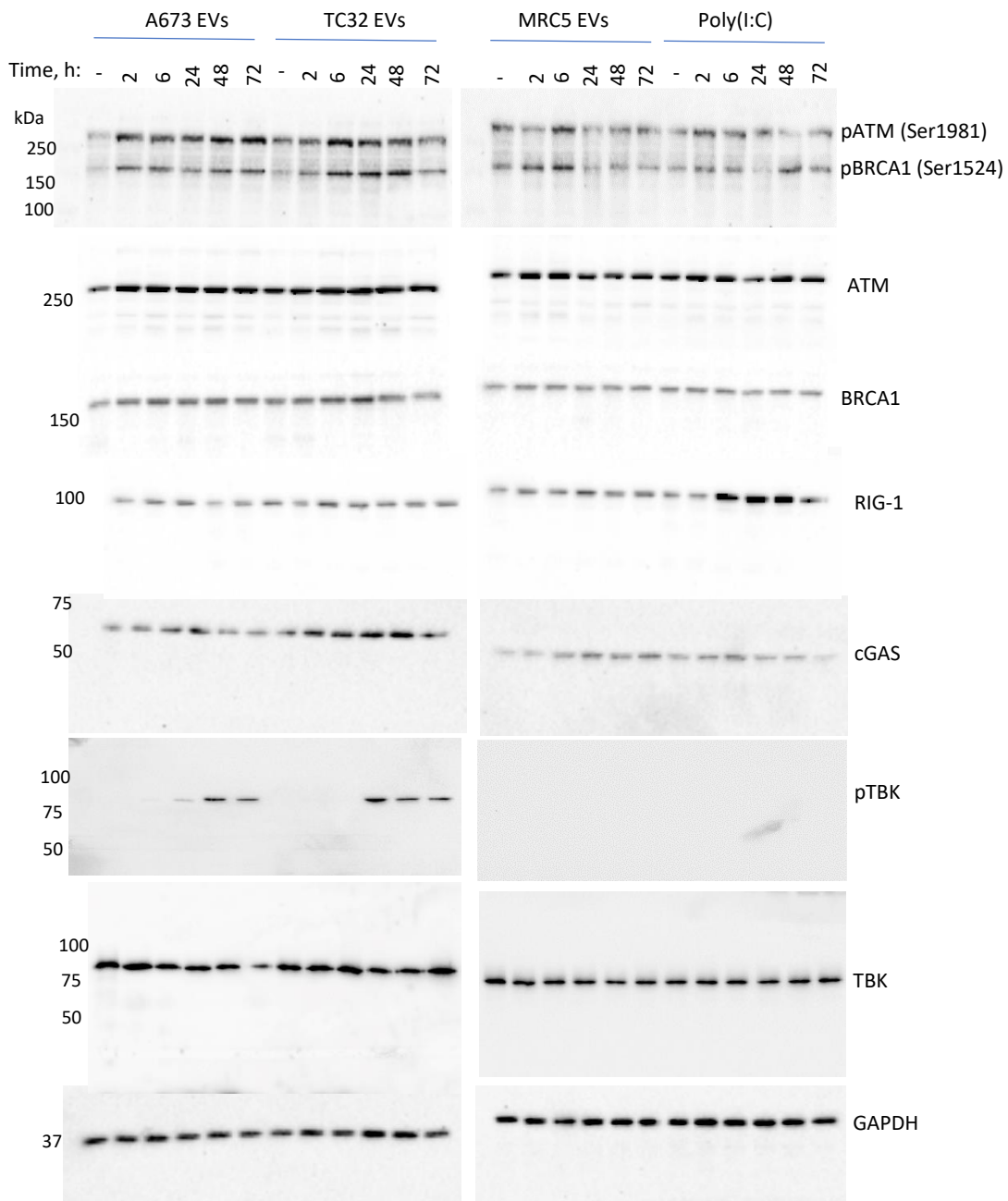
**Full-size unedited gel for Figure 4D**



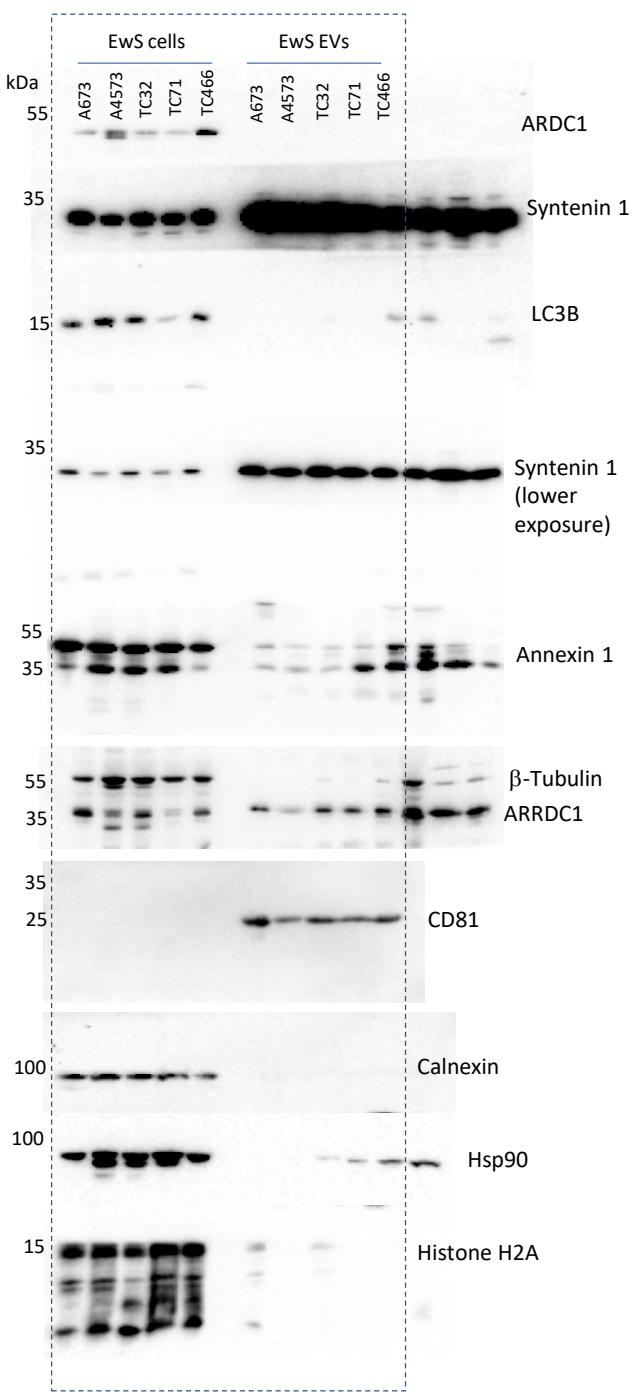
**Full-size unedited gel for Figure 5C**



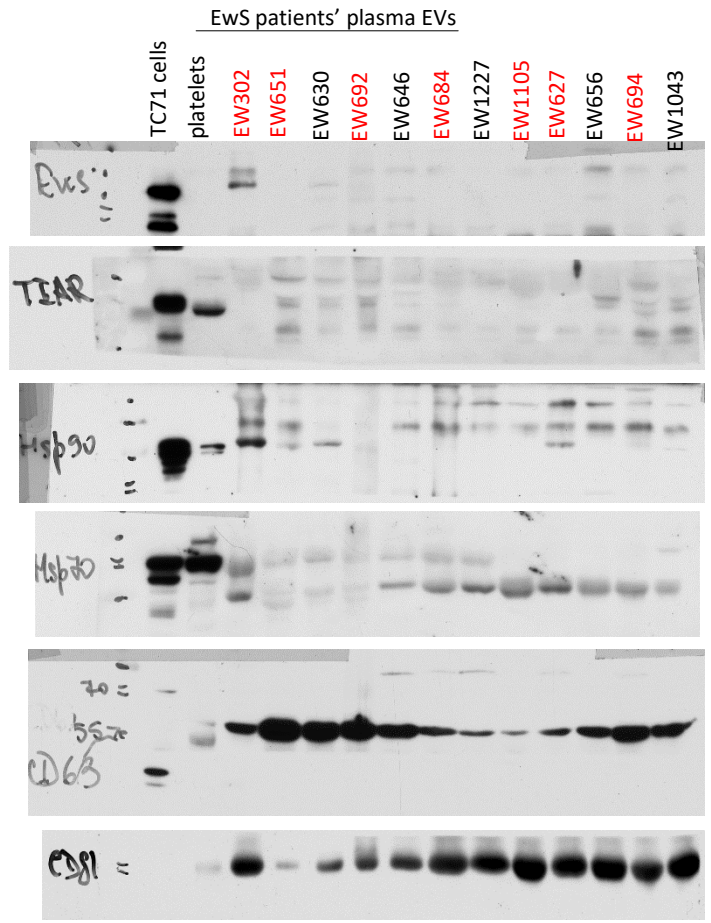
**Full-size unedited gel for Figure 5G**



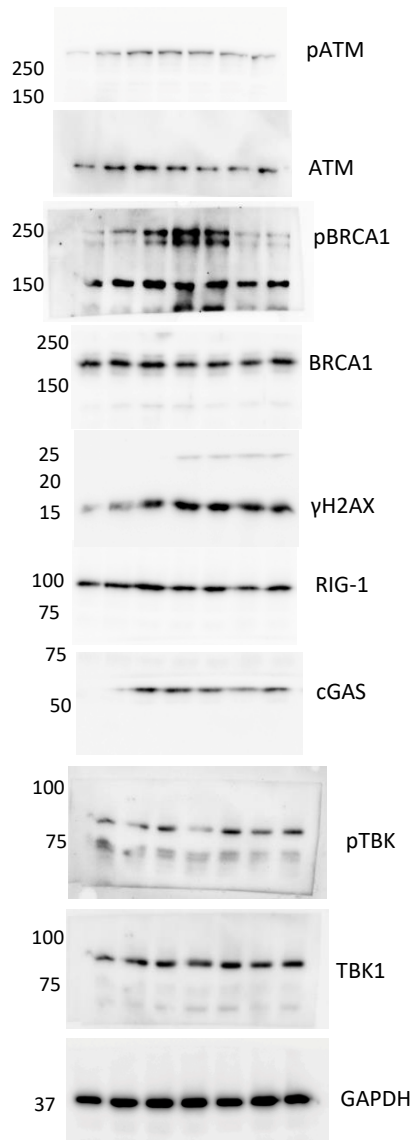
**Full-size unedited gel for Figure 7F**



**Full-size unedited gel for Supplemental Figure 1D**

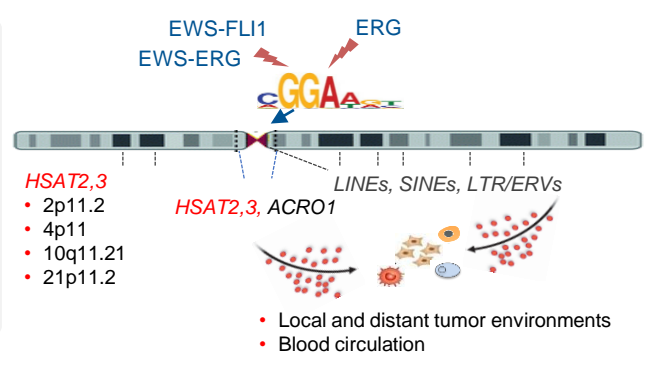


**Full-size unedited gel for Supplemental Figure 2C**



**Full-size unedited gel for Supplemental Figure 12**

Proposed model



Tumors/Cells  
RNA  
Pathway

	HSAT2,3-high tumors	EWS-FLI1	EwS EVs	Androgen
Tumors/Cells	EwS, n=21	Localized PCa, n=98	HeLa cells	MRC5 fibroblasts
RNA	HSAT2,3 ↑	HSAT2,3 ↑	HSAT2,3 ↑	HSAT2,3 ↑
Pathway	IFN $\alpha$ /III ↓ IL6-JAK-STAT3 ↓ E2F, Myc targets ↑ G2/M checkpoint ↑	IFN $\alpha$ /III, IFN $\gamma$ ↑ Myc targets ↑ G2/M checkpoint ↑ DNA repair ↑ Mitotic spindle ↑	IFN $\alpha$ /III ↑ IL6-JAK-STAT3 ↑ E2F targets ↑ G2/M checkpoint ↑ Mitotic spindle ↑	IFN $\alpha$ /III, pTBK1 ↑ cGAS, pBRCA1, pATM ↑ DNA damage ↑ Kinetochores assembly ↑ Mitotic spindle ↑
				VCaP cells, ERG ↑ HSAT2,3 ↑ IFN response ↑ IL6-JAK-STAT3 ↑ Androgen response ↑ DNA damage ↑ Cell division ↑

Observed & putative function

- Cancer-associated local and systemic inflammation
  - Compromised centromeric and kinetochore function
  - DNA damage, cell division defects, senescence
- Affected cells: EWS-FLI1-high cells and tumors, androgen-stimulated prostate cancer cells; ERG-overexpressing non-transformed prostate epithelial cells, cancer EV-targeted recipient cells, e.g., stromal fibroblasts and immune cells