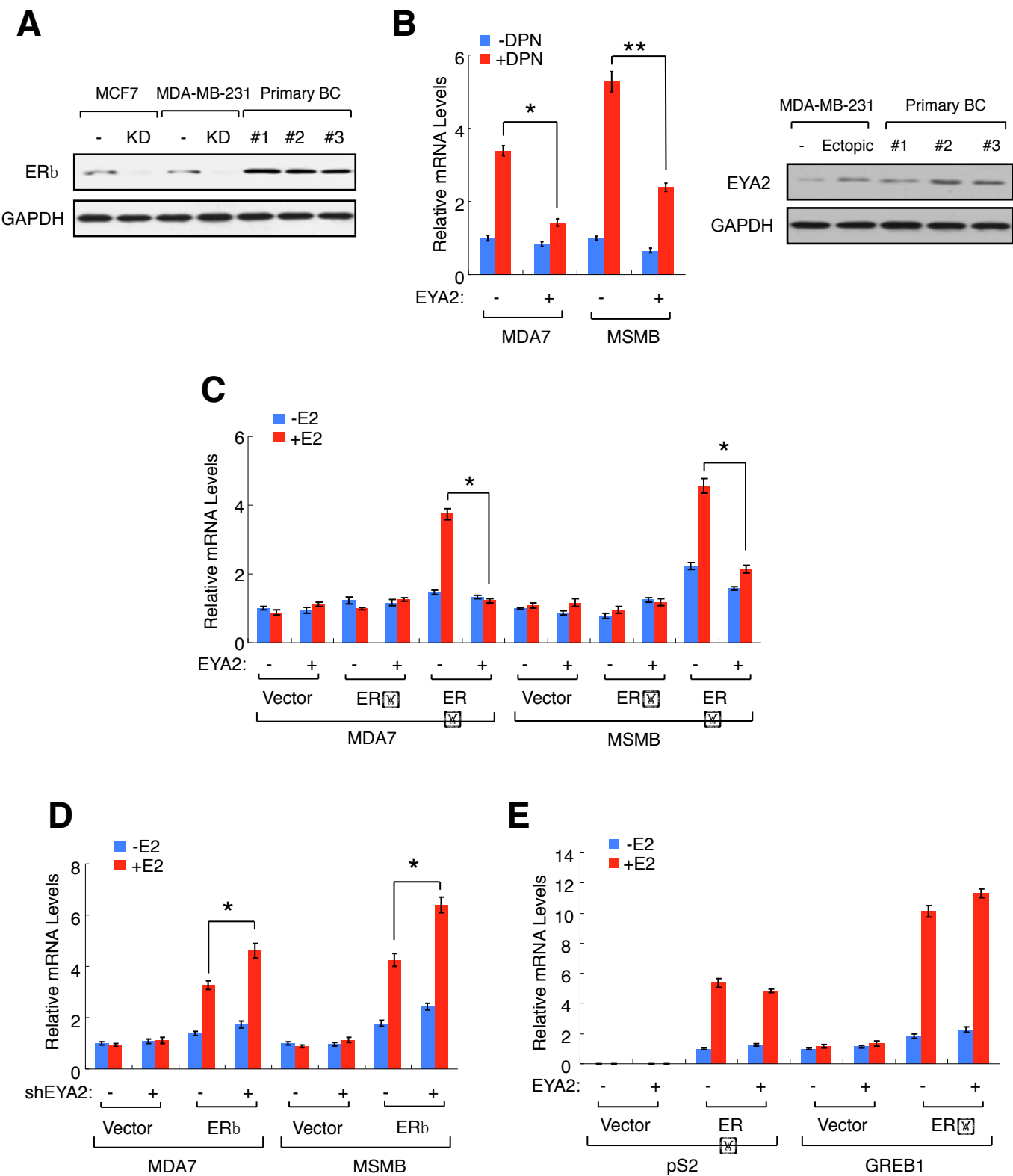


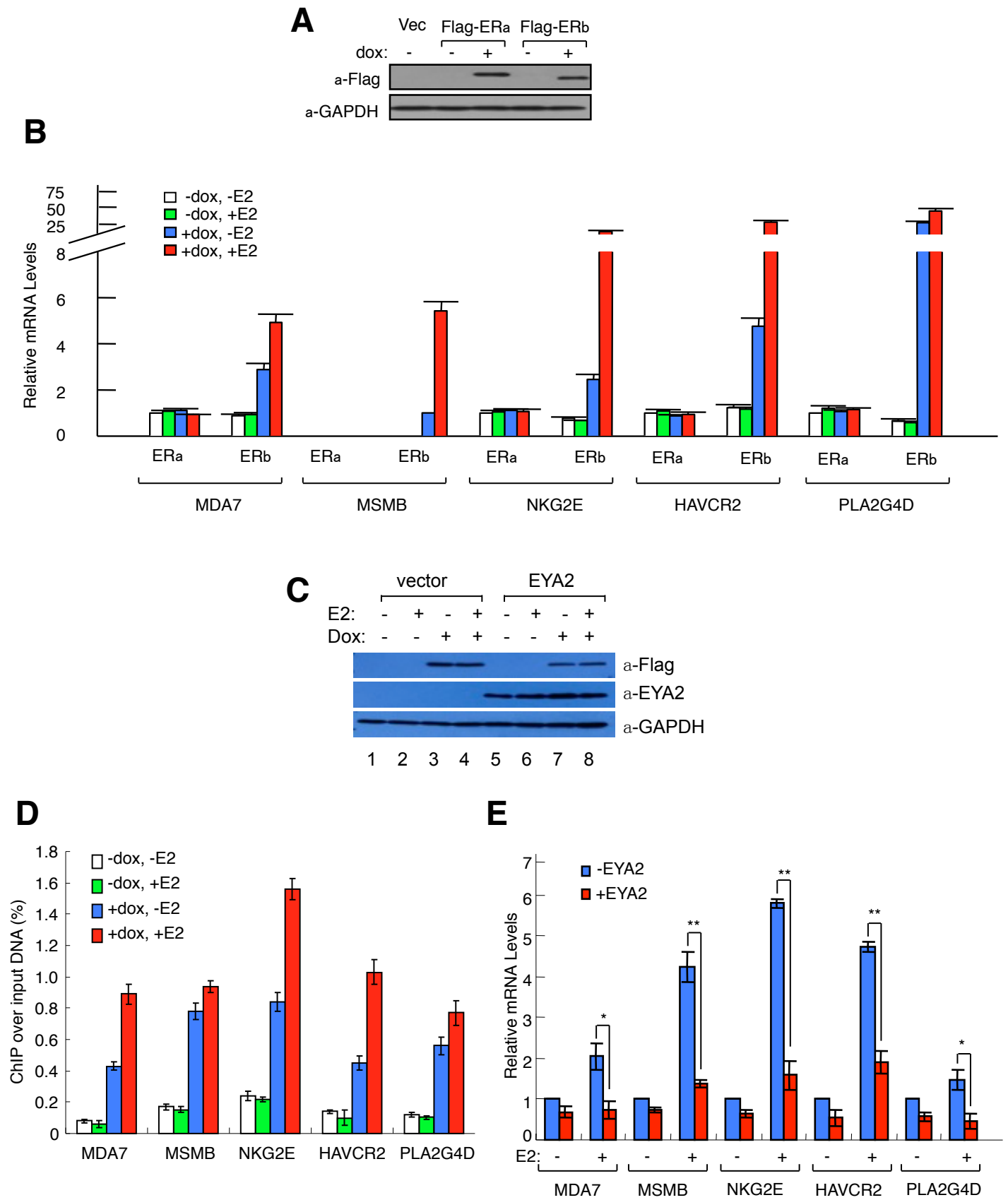
Yuan et al., Supplemental Figure 1, related to Figure 1

EYA2 modulates the transcriptional activity of ER_b, but not ER_a



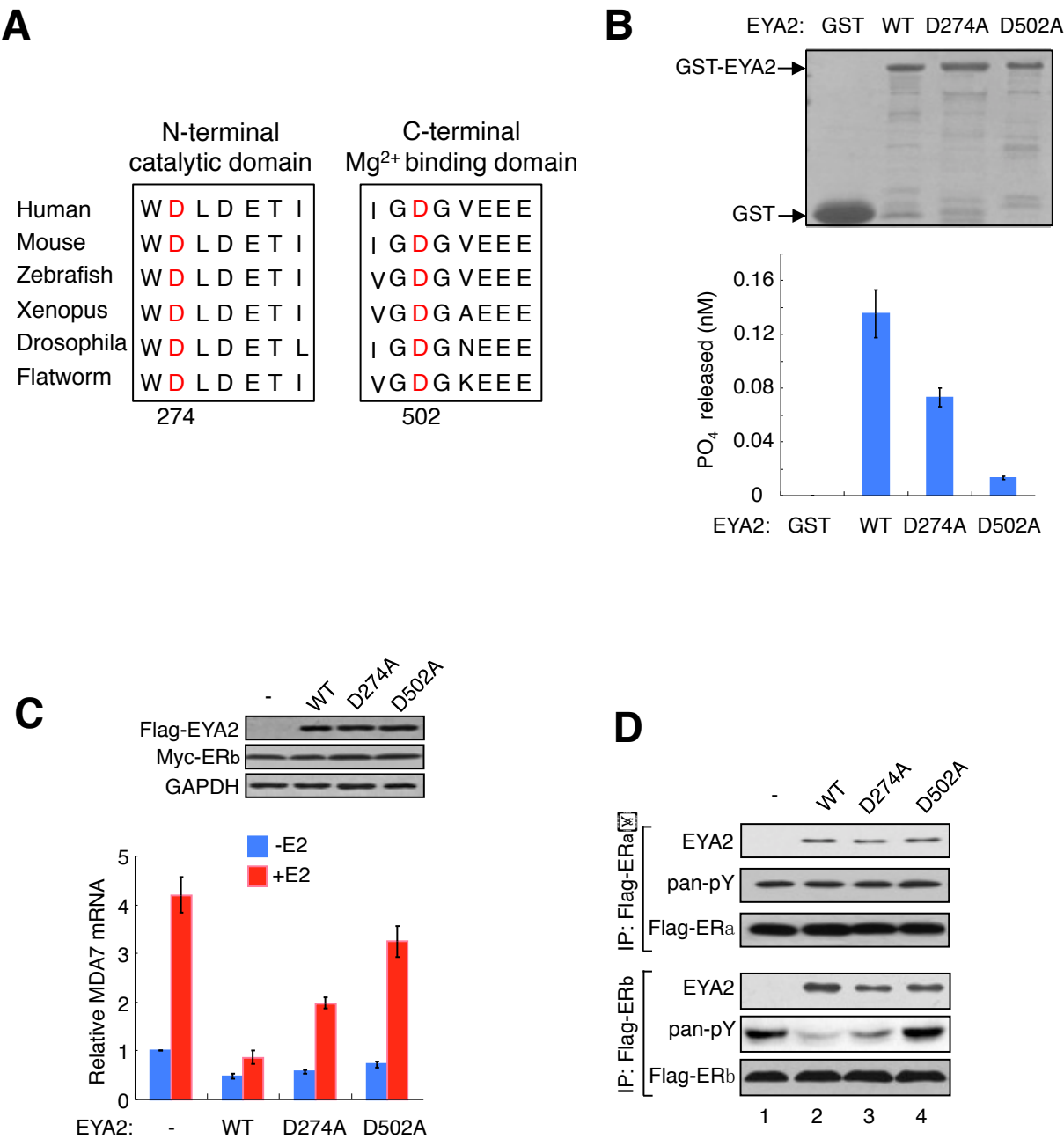
Yuan et al., Supplemental Figure 2, related to Figure 1

EYA2 represses ER^b-mediated transcription of multiple ER^b-specific target genes



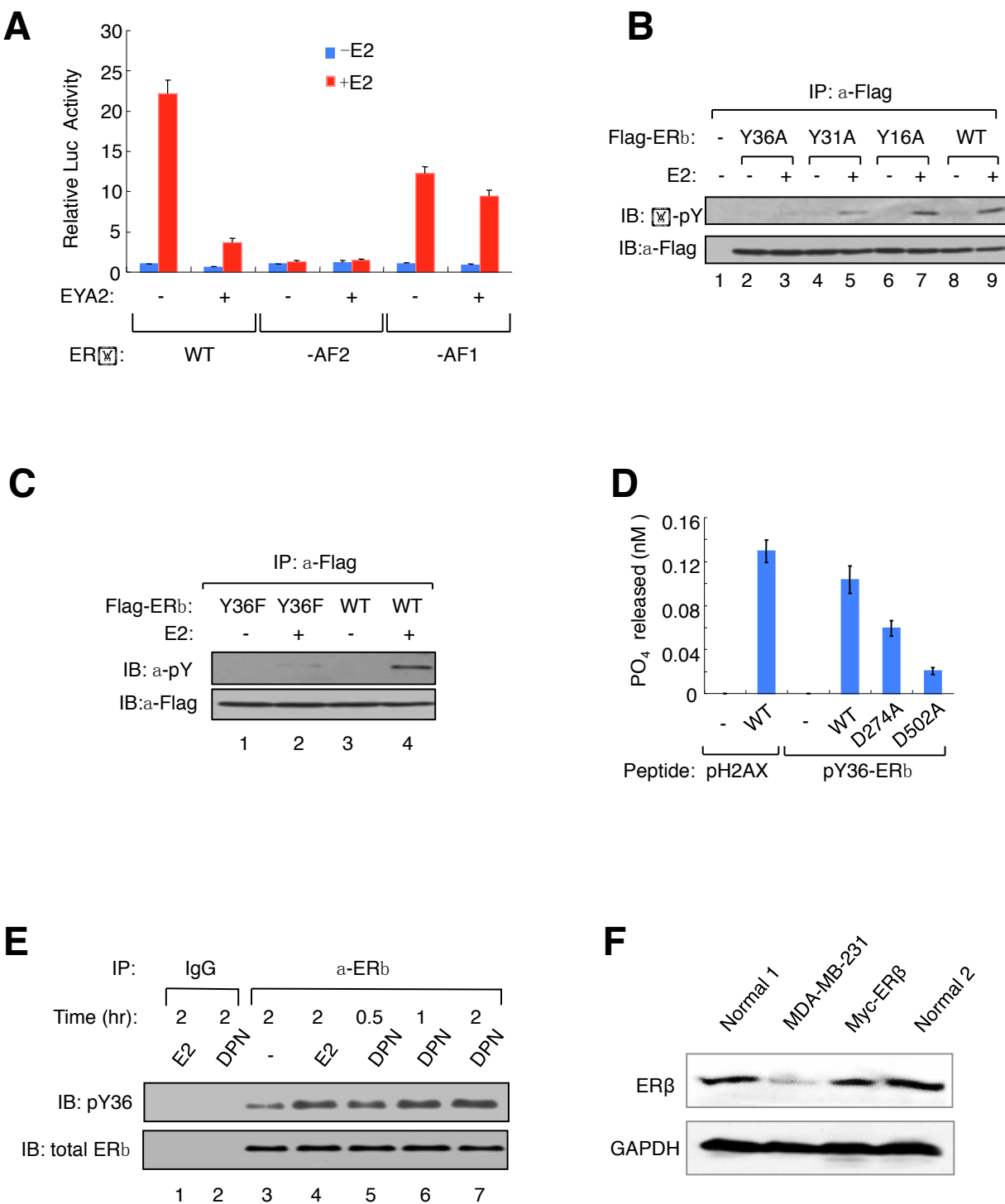
Yuan et al., Supplemental Figure 3, related to Figure 2

EYA2 specifically dephosphorylates ERb, not ERa.



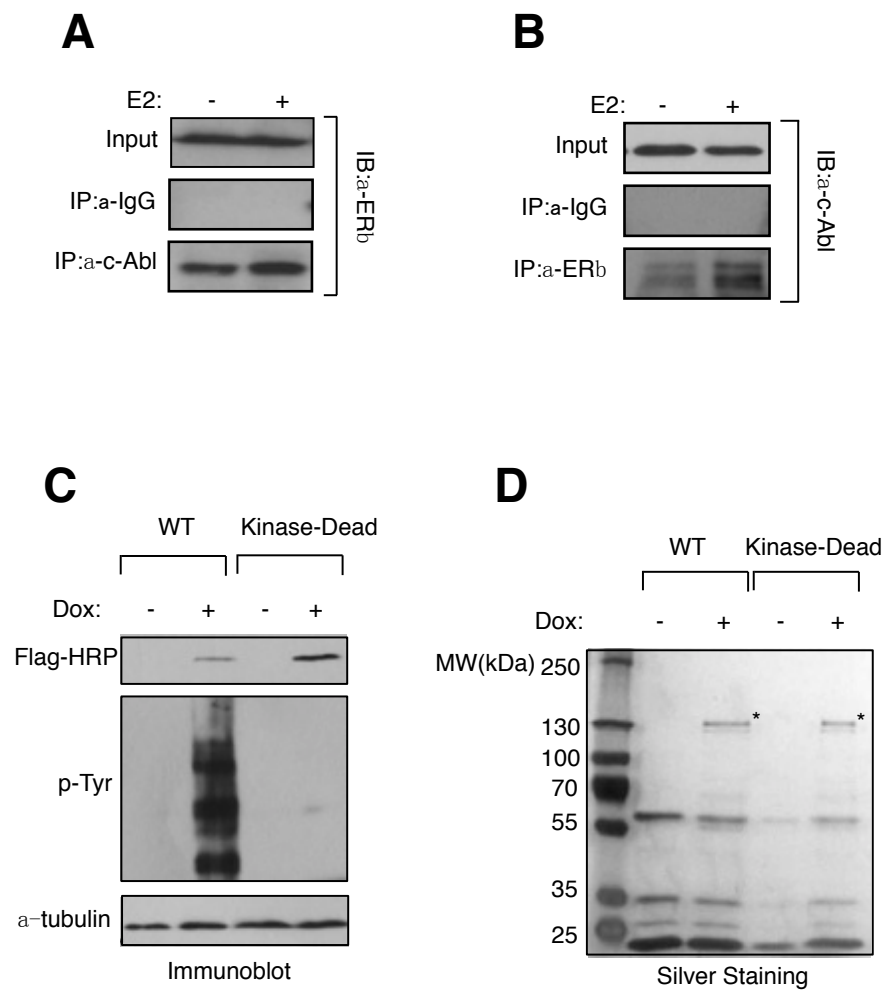
Yuan et al., Supplementary Figure 4, related to Figure 2

EYA2 directly dephosphorylates pY36-ERb

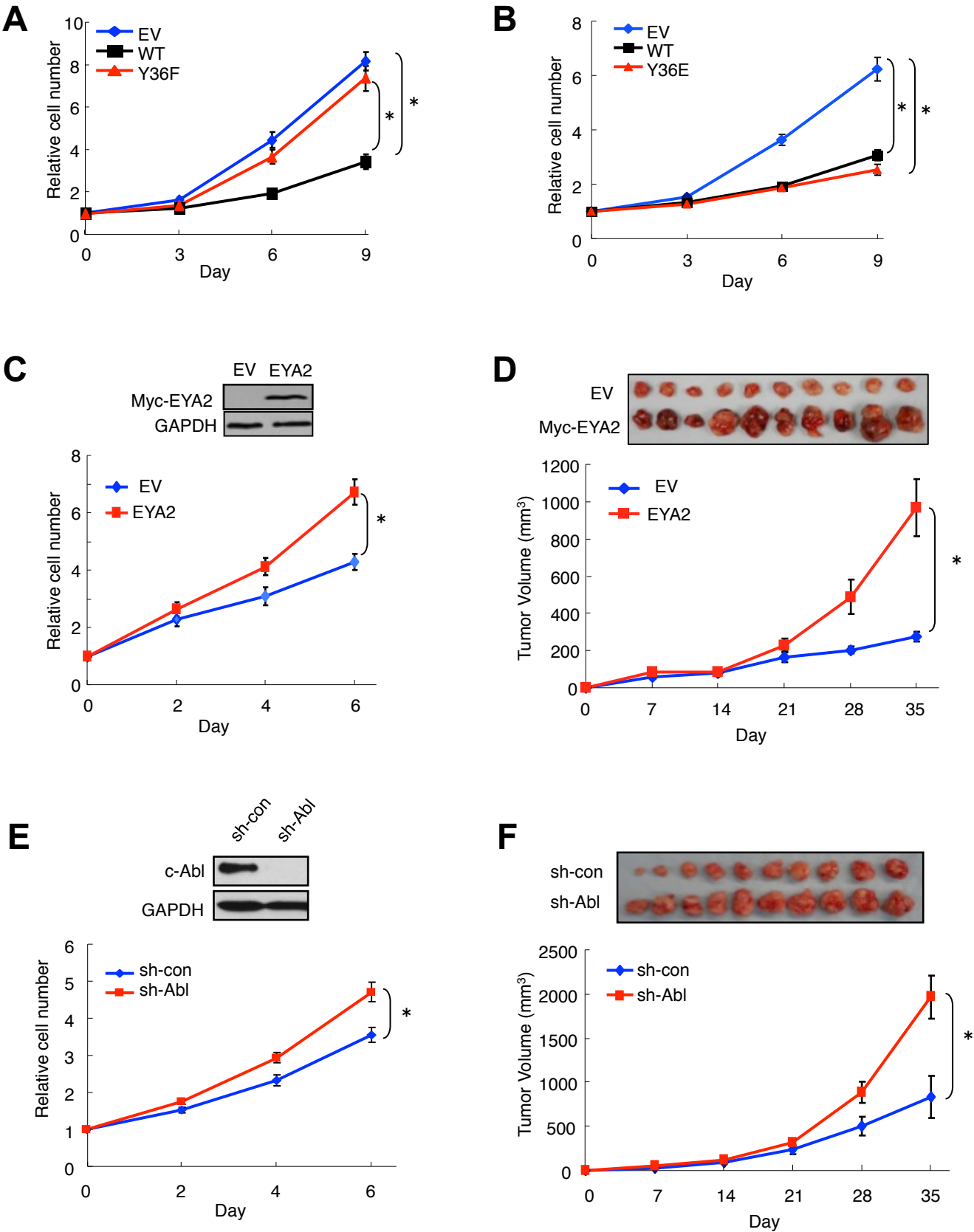


Yuan et al., Supplemental Figure 5, related to Figure 3

c-Abl binding to ERb, purification of WT and mutant c-Abl proteins



Yuan et al., Supplemental Figure 6, related to Figure 5
Effects of pY36, EYA2 and c-Abl on tumor cell growth

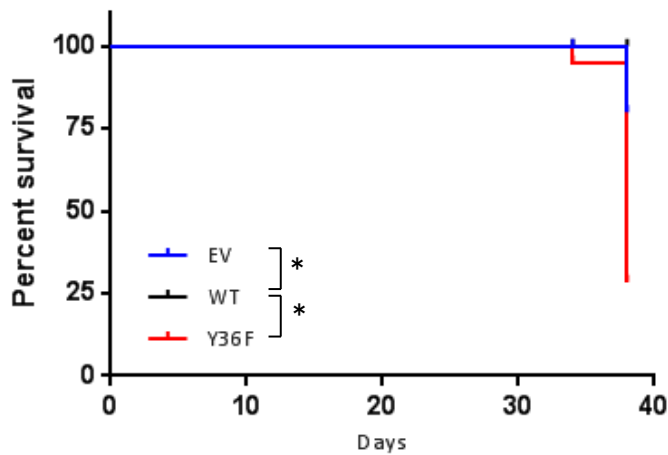


Yuan et al., Supplemental Figure 7, related to Figure 5

Kaplan-Meier survival curves

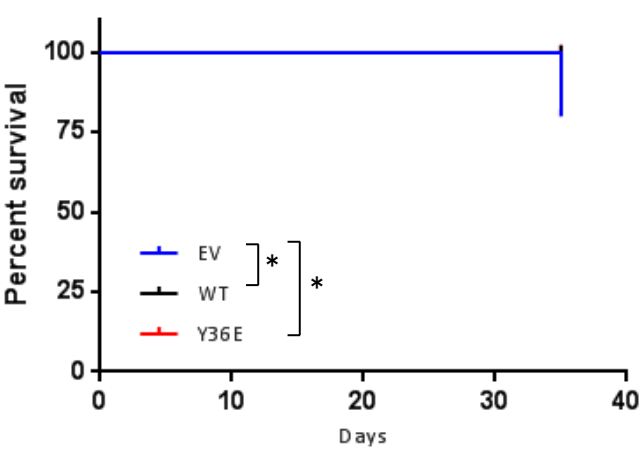
A

Related to Fig 5A



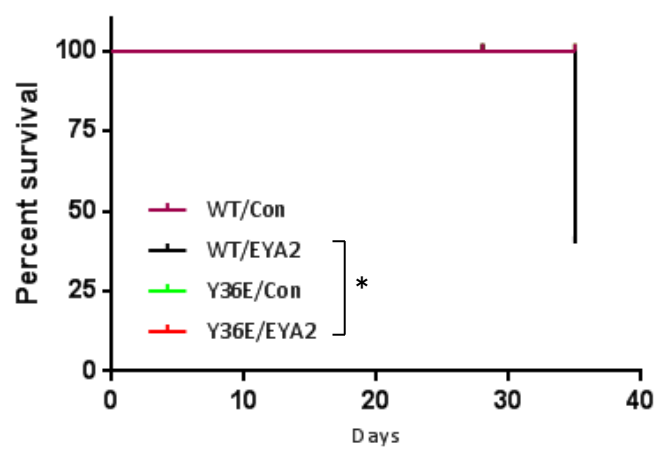
B

Related to Fig 5B



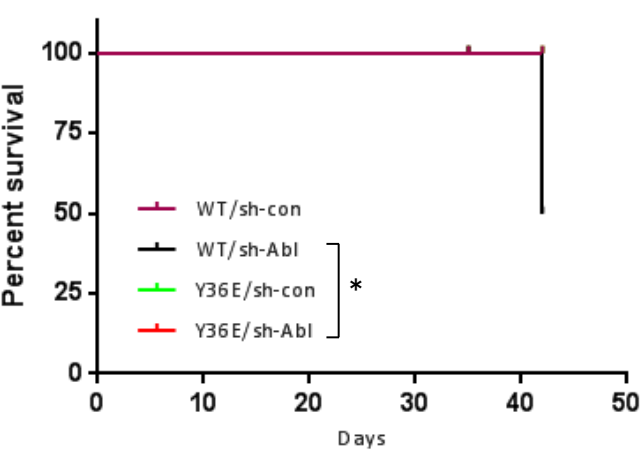
C

Related to Fig 5C



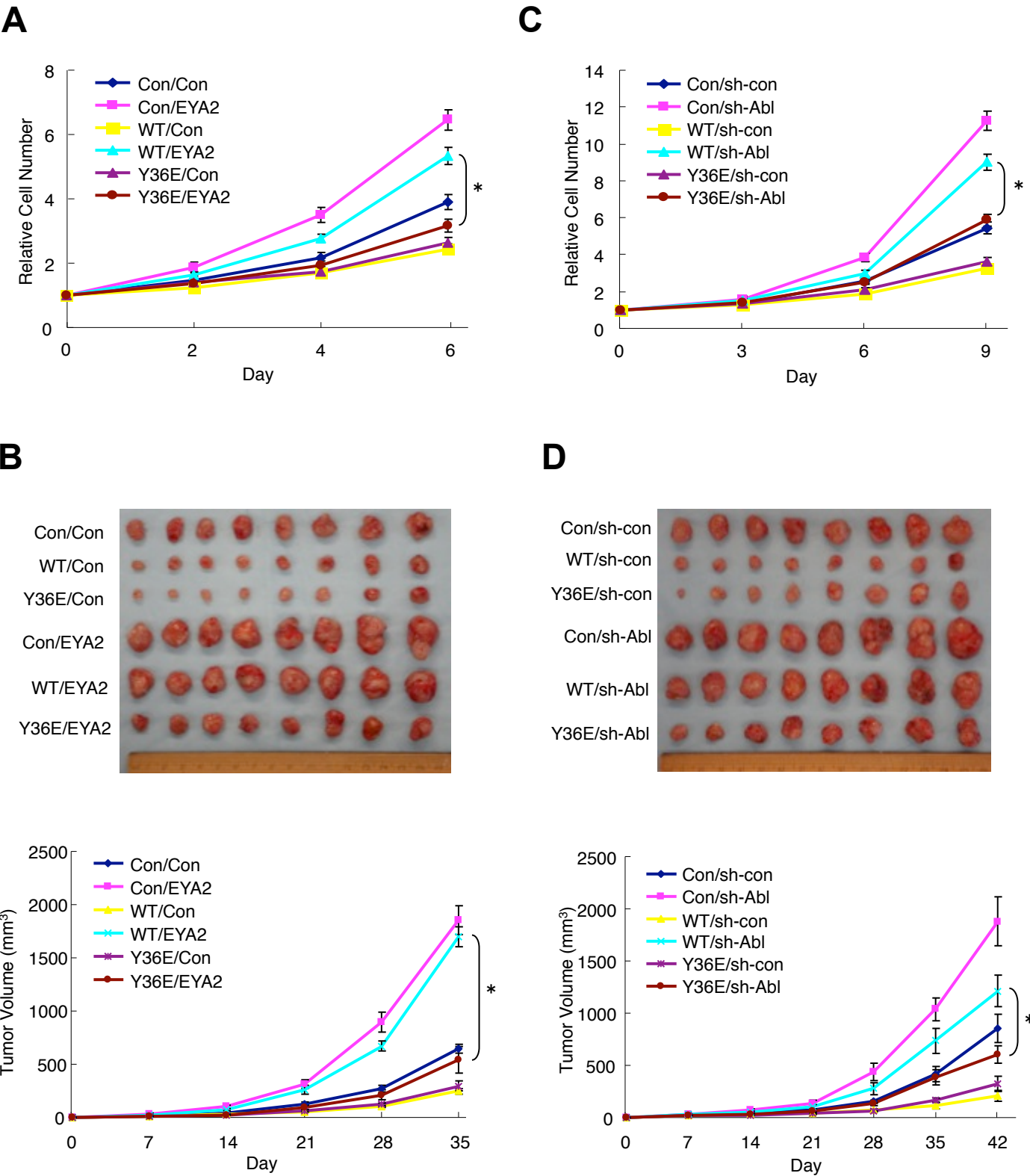
D

Related to Fig 5D



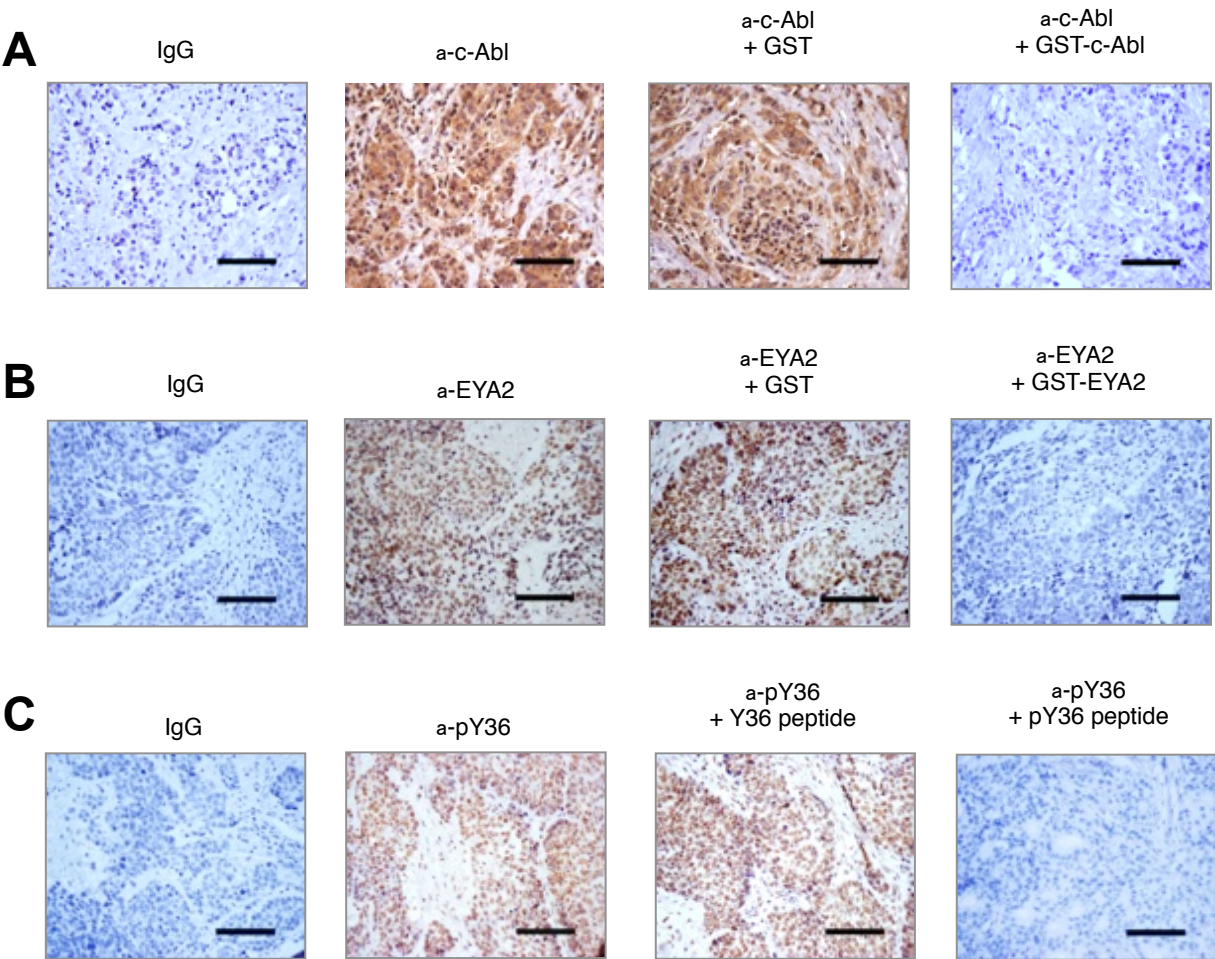
Yuan et al., Supplemental Figure 8, related to Figure 5

EYA2 and c-Abl regulate the antitumor activity of ER β through pY36

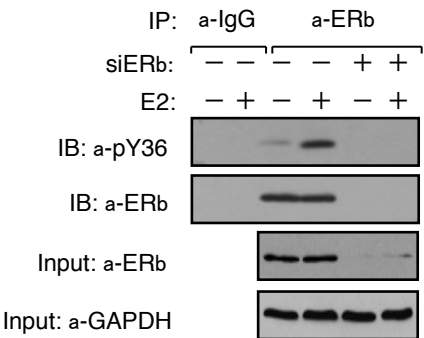


Yuan et al., Supplemental Figure 9, related to Figure 6

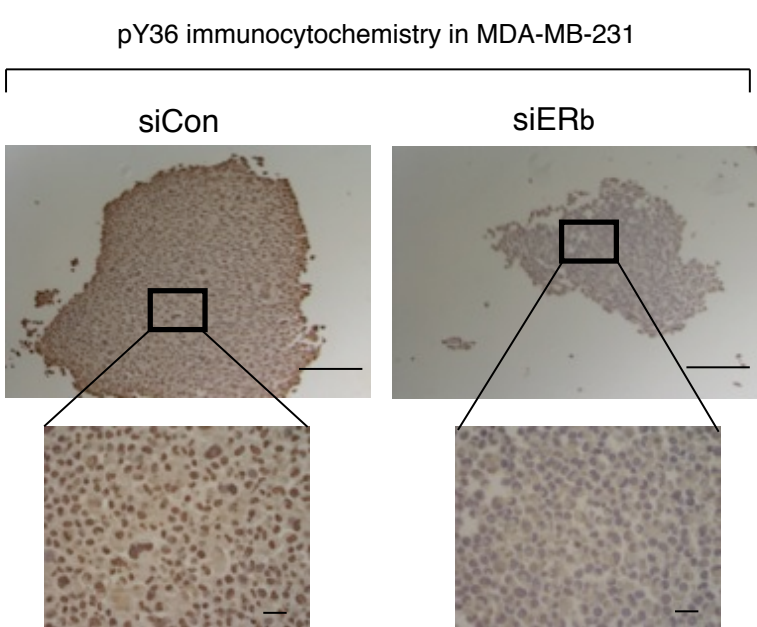
Validation of the specificity of the antibodies used in IHC



D

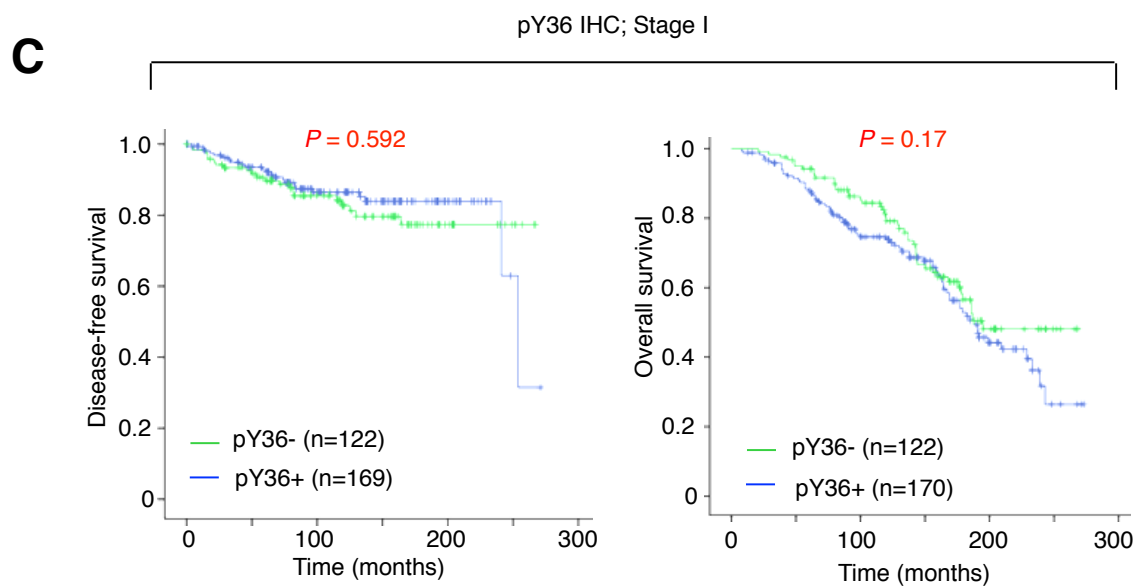
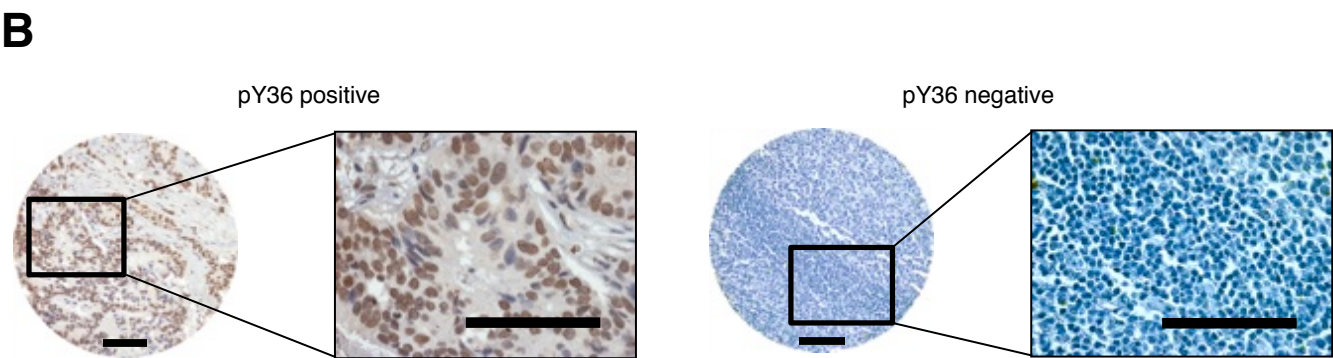
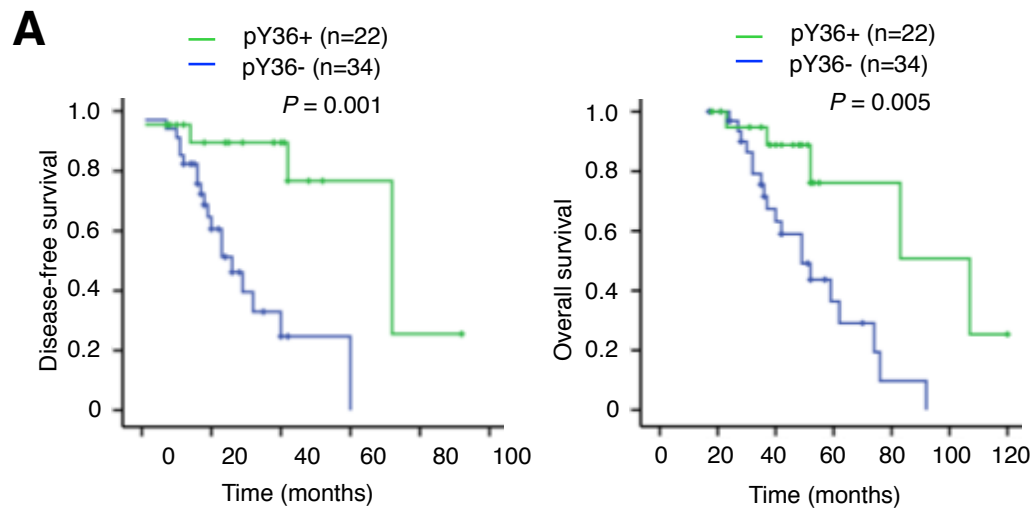


E



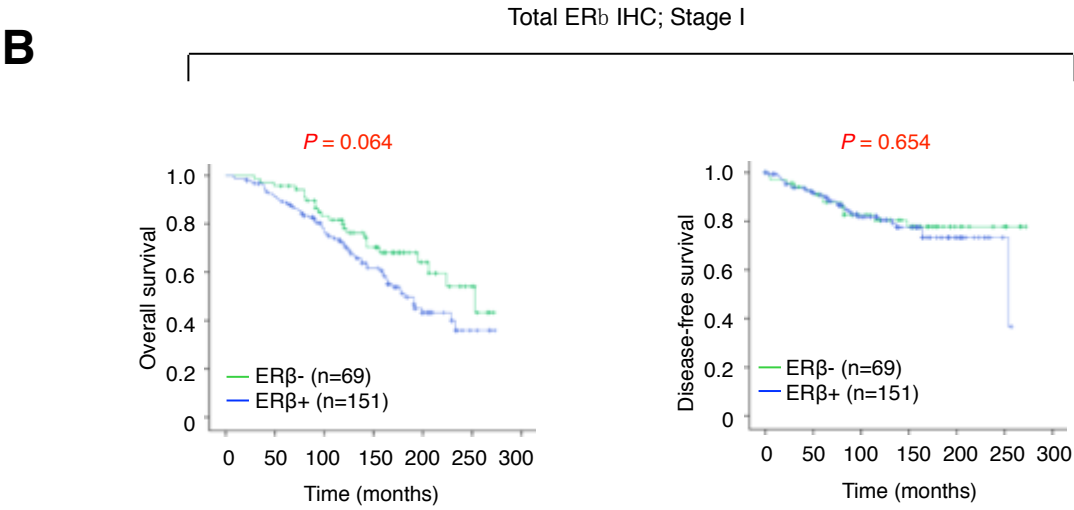
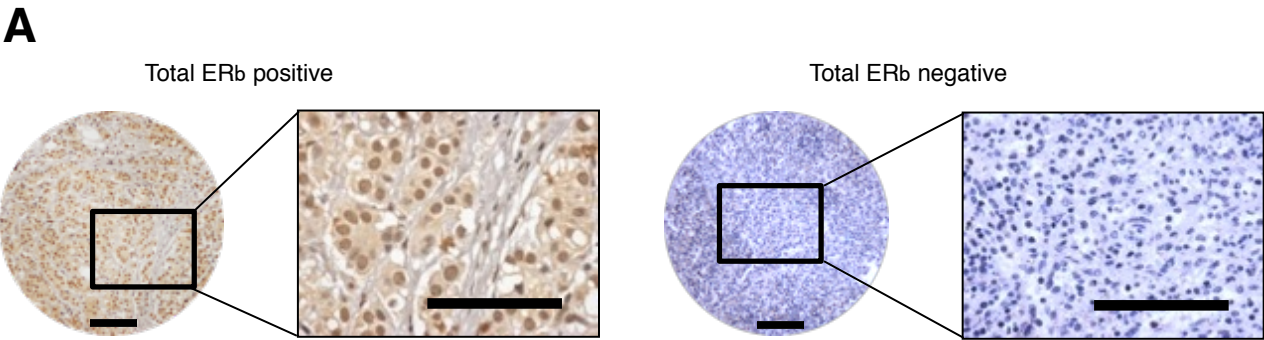
Yuan et al., Supplemental Figure 10, related to Figure 6

pY36 correlates with patient survival



Yuan et al., Supplemental Figure 11, related to Figure 6

Total ERb IHC in breast tumors



Supplemental Table S1, related to Figure 6

A summary of the IHC results, with tissues categorized by low and high expression of pY36, c-Abl, and EYA2. The P value is generated using the χ^2 test.

	pY36 Low	pY36 High
c-Abl Low	42	13
c-Abl High	16	33

$$P = 7.46 \times 10^{-6}$$

	pY36 Low	pY36 High
EYA2 Low	10	26
EYA2 High	48	20

$$P = 2.89 \times 10^{-5}$$

Supplemental Table S2. Cox univariate and multivariate analysis of disease-free survival and overall survival in stage II and III breast cancer patients

Factor	Univariate			Multivariate		
	<i>P</i> value	HR	95% CI	<i>P</i> value	HR	95% CI
Disease-free survival						
Tumor size: ≤20 vs > 20 mm	0.0004	1.955	1.323-2.890	0.007	2.327	1.405-3.854
Lymph node: negative vs positive	0.0001	2.259	1.723-2.963	0.001	2.341	1.463-3.745
Grade: I vs II/III	0.035	1.561	1.031-2.362	0.050	1.773	1.000-3.144
ERα: negative vs positive	0.003	0.635	0.471-0.854	0.038	0.625	0.401-0.975
PR: negative vs positive	0.030	0.725	0.541-0.970	0.791	1.062	0.679-1.661
HER2: negative vs positive	0.098	1.361	0.945-1.958	0.818	1.051	0.688-1.606
ERβ: negative vs positive	0.123	0.768	0.550-1.074	0.714	1.086	0.699-1.685
pY36: negative vs positive	0.022	0.706	0.525-0.951	0.468	0.860	0.573-1.292
Overall survival						
Tumor size: ≤20 vs > 20 mm	0.0001	1.711	1.262-2.319	0.002	1.916	1.272-2.887
Lymph node: negative vs positive	0.0008	1.344	1.075-1.680	0.009	1.654	1.137-2.407
Grade: I vs II/III	0.024	1.465	1.051-2.040	0.132	1.392	0.905-2.141
ERα: negative vs positive	0.004	0.696	0.544-0.891	0.110	0.756	0.537-1.066
PR: negative vs positive	0.034	0.771	0.607-0.980	0.829	0.963	0.682-1.360
HER2: negative vs positive	0.404	1.162	0.817-1.654	0.756	1.047	0.785-1.397
ERβ: negative vs positive	0.003	0.656	0.499-0.864	0.862	0.969	0.679-1.383
pY36: negative vs positive	0.0004	0.640	0.500-0.819	0.021	0.769	0.616-0.961