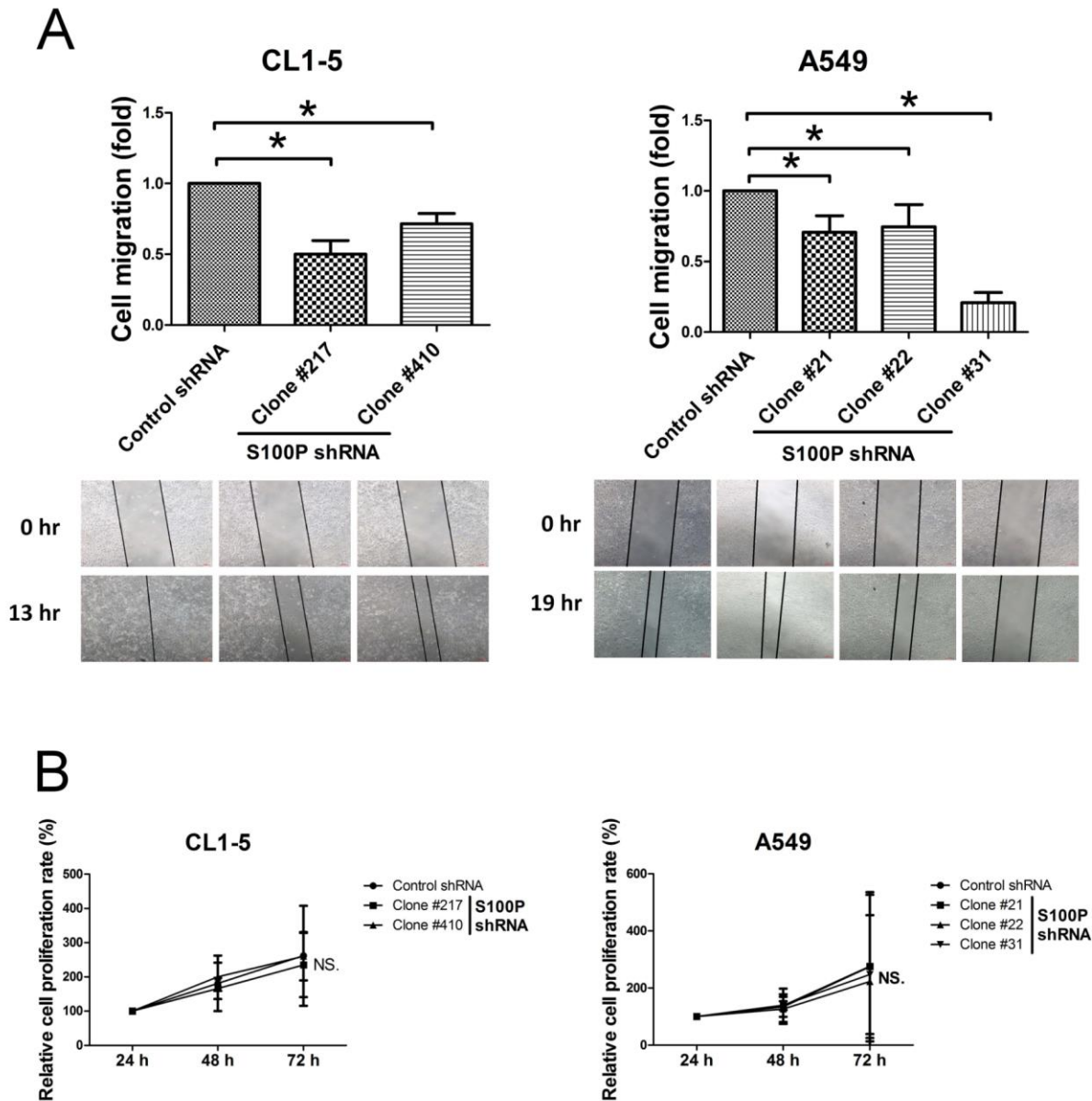
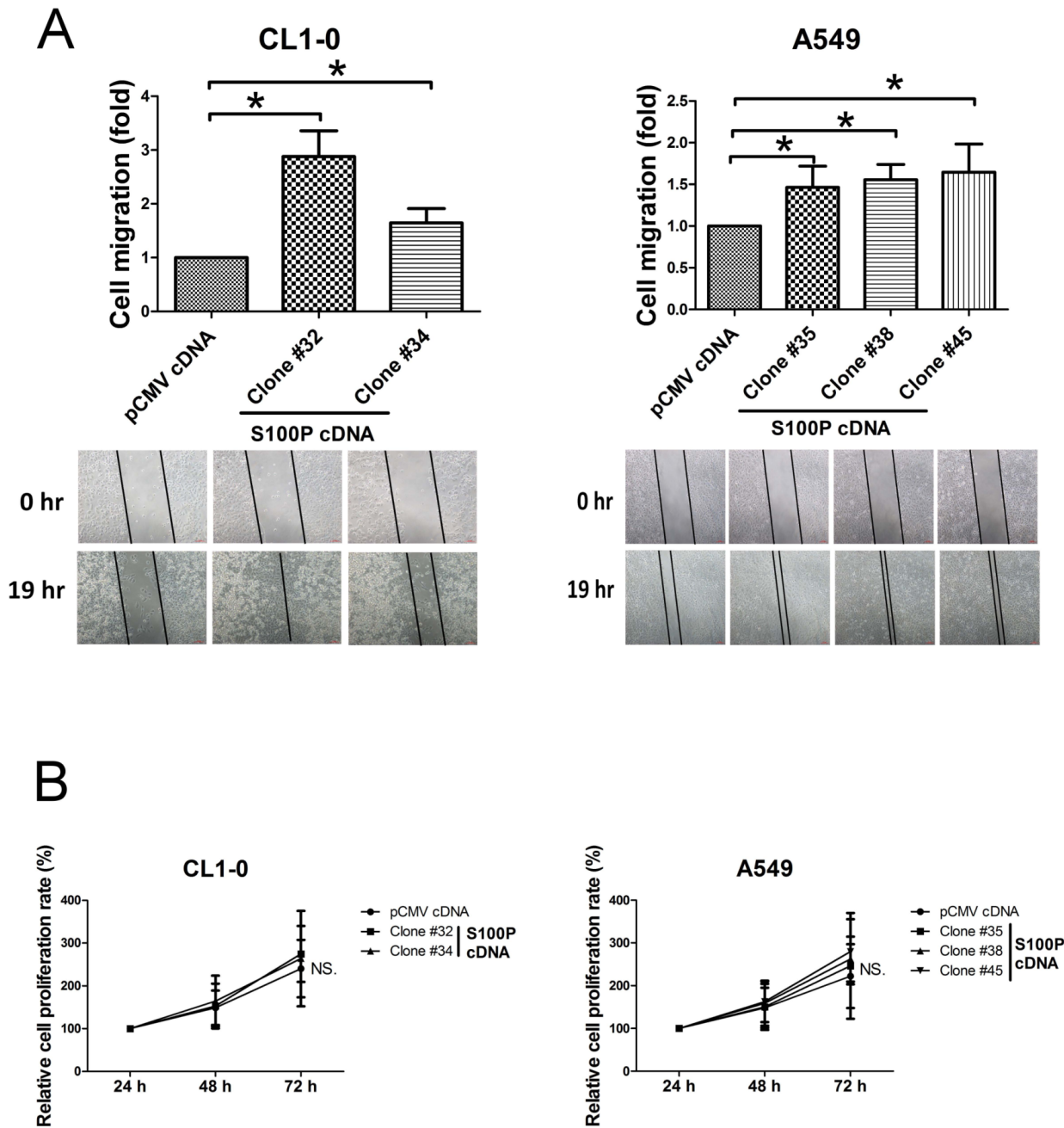


# S100P interacts with integrin $\alpha 7$ and increases cancer cell migration and invasion in lung cancer

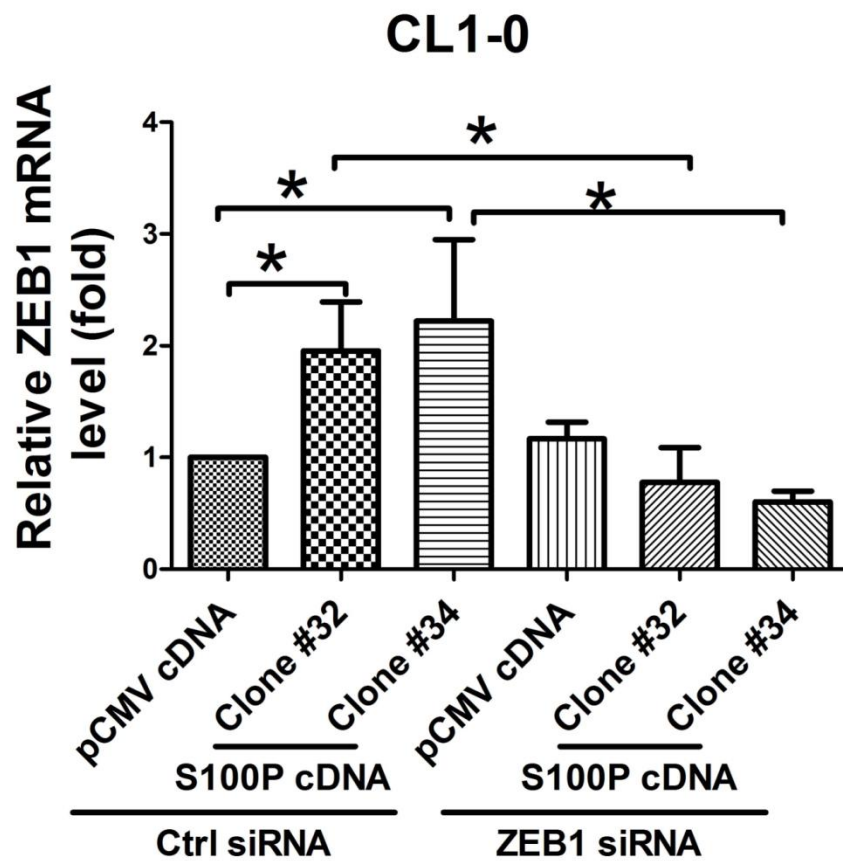
## Supplementary Material



**Figure 1. Inhibition of S100P reduced cell migration.** Knockdown of S100P (A) decreased cell migration, but (B) did not affect cell proliferation in CL1-5 and A549 cells, as assessed by wound-healing assay or by WST-1 for indicated times. Data were as the mean $\pm$ SD. \* $p$ <0.05 or significant difference between control and test groups; ns, non-significant

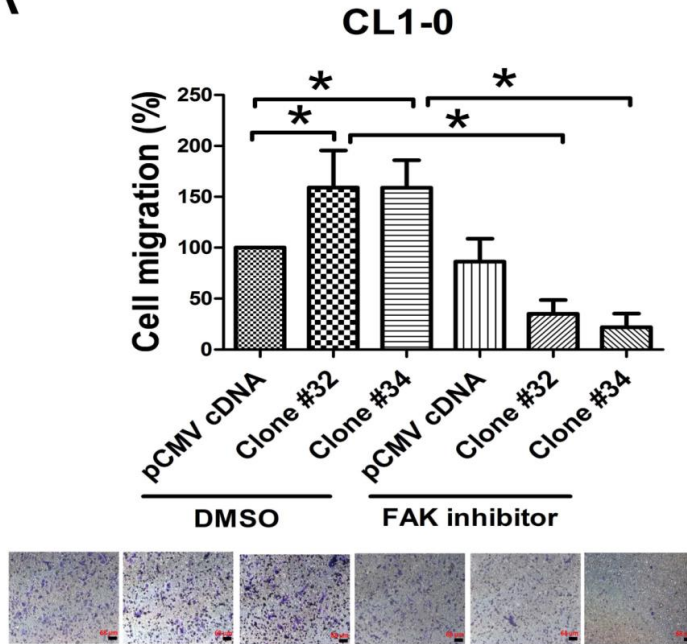


**Figure 2. Overexpression of S100P increased cell migration.** Elevated S100P (A) enhanced cell migration, but (B) did not affect cell proliferation in CL1-0 and A549 cells, as assessed by wound healing assay or by WST-1 for indicated times. Data were provided as the mean±SD. \* $p < 0.05$  or significant difference between control and test groups; ns, non-significant

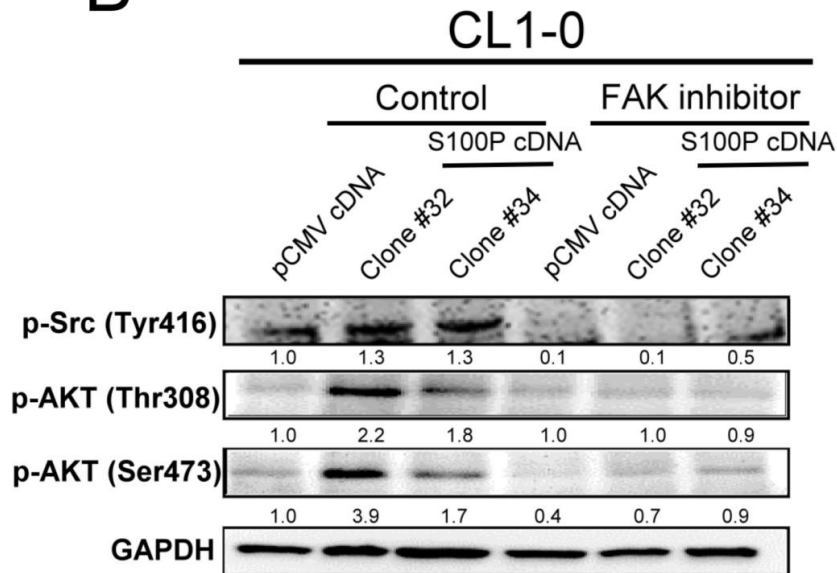


**Figure 3. The expression of ZEB1.** S100P overexpressing CL1-0 cells were transfected with either control or ZEB1 siRNA. The mRNA level of ZEB1 was determined by qRT-PCR 24 h after transfection. Data were as the mean±SD. \* $p < 0.05$ , or a significant difference between the two test groups

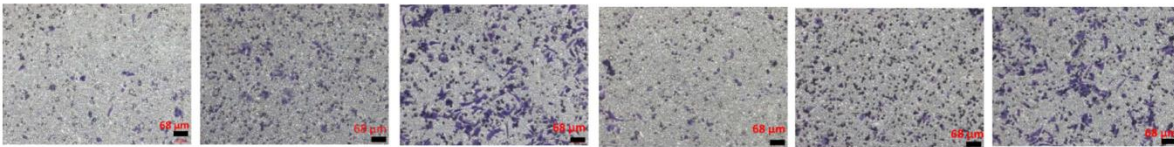
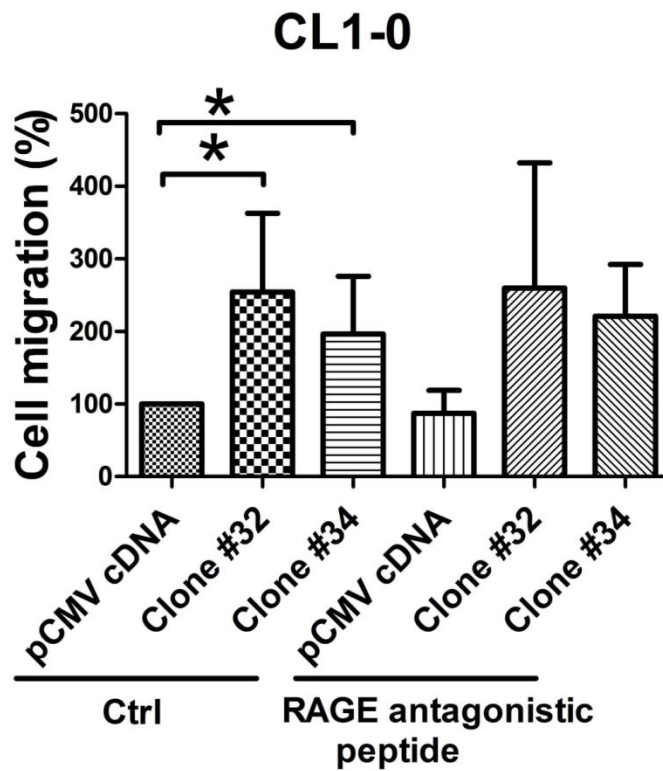
A



B



**Figure 4. The role of FAK on cell migration and activation of Src and AKT.** S100P overexpressing CL1-0 cells were treated with FAK inhibitors (20  $\mu$ M) and cell migration was assessed by the transwell system. The levels of various protein were assessed by immunoblot. Data were as mean $\pm$ SD. \* $p$ <0.05, or a significant difference between the two test groups.



**Figure 5. RAGE inhibition did not affect the S100P induced cell migration.** S100P overexpressing CL1-0 cells were treated with RAGE inhibitors and cell migration was assessed by the transwell system. Data were as mean±SD. \* $p < 0.05$ , or a significant difference between the two test groups.

**Table 1.** The mRNA transcript of S100P in non-tumor and tumor region in a cDNA array of lung cancer patients

	<b>S100P</b>						
	N	<b>High expression in tumor region</b>		<b>Low expression in tumor region</b>		<b>No difference in tumor region</b>	
		n	%	n	%	n	%
<b>Tumor</b>	24	13	54.2%	7	29.2%	4	16.6%
<b>Gender</b>	24						
Male	16	10	62.5%	4	25.0%	2	12.5%
Female	8	3	37.5%	3	37.5%	2	25.0%