

Supplementary Table 1. The list of primers used in the study

| Primers and number           | Sequence (5'-3')                   |
|------------------------------|------------------------------------|
| Mouse $\beta$ -actin Forward | AGCCATGTACGTAGCCATCCA              |
| Mouse $\beta$ -actin Reverse | TCTCCGGAGTCCATCACAATG              |
| Mouse $\beta$ -actin Probe   | TGTCCTGTATGCCTCTGGTCGTACCAC        |
| Mouse CD163 Forward          | GTGTGACATGTTCTGATGGA               |
| Mouse CD163 Reverse          | TCTTCCCAGTCAGCTTCT                 |
| Mouse CD163 Probe            | TCTCCACCTCCACAATGCCAGCAC           |
| Mouse CD206 Forward          | TGCTTTAACCTGGCATCAG                |
| Mouse CD206 Reverse          | GGAACTGGTTAATCCTGTGAG              |
| Mouse CD206 Probe            | TGAGTGTCACGGAGATCCACGAGCA          |
| Mouse IL-1 $\beta$ Forward   | CTTTGAAGAAGAGCCCATCC               |
| Mouse IL-1 $\beta$ Reverse   | TTCATCTCGGAGCCTGTAG                |
| Mouse IL-1 $\beta$ Probe     | CCTGCTGGTGTGTGACGTTCCCAT           |
| Mouse IL-6 Forward           | GAGGATACCACTCCCAACAGACC            |
| Mouse IL-6 Reverse           | AAGTGCATCATCGTTGTTCATACA           |
| Mouse IL-6 Probe             | TGTCTATACCACTTCACAAGTCGGAGGCT      |
| Mouse stabilin-1 Forward     | TACTGTTACCGCGTGCAAGACG             |
| Mouse stabilin-1 Reverse     | ATTGGCATAGCCAGCAGCATC              |
| Mouse stabilin-1 Probe       | TCTTGGCCGCCACTGCCAATTCTCCACCTTCTAT |
| Mouse TNF- $\alpha$ Forward  | CTATGTCTCAGCCTCTTCT                |
| Mouse TNF- $\alpha$ Reverse  | GGAACTTCTCATCCCTTTG                |
| Mouse TNF- $\alpha$ Probe    | CAGTAGACAGAAGAGCGTGGTGGC           |
| Human CCR2 Forward           | GACCAGGAAAGAATGTGAAAGTGA           |
| Human CCR2 Reverse           | GCTCTGCCAATTGACTTTCCT              |
| Human CCR2 Probe             | CACAAGGACTCCTCGATGGTCGTGG          |

Supplementary Table 2. Clinical and pathological parameters of breast cancer patients (German cohort).

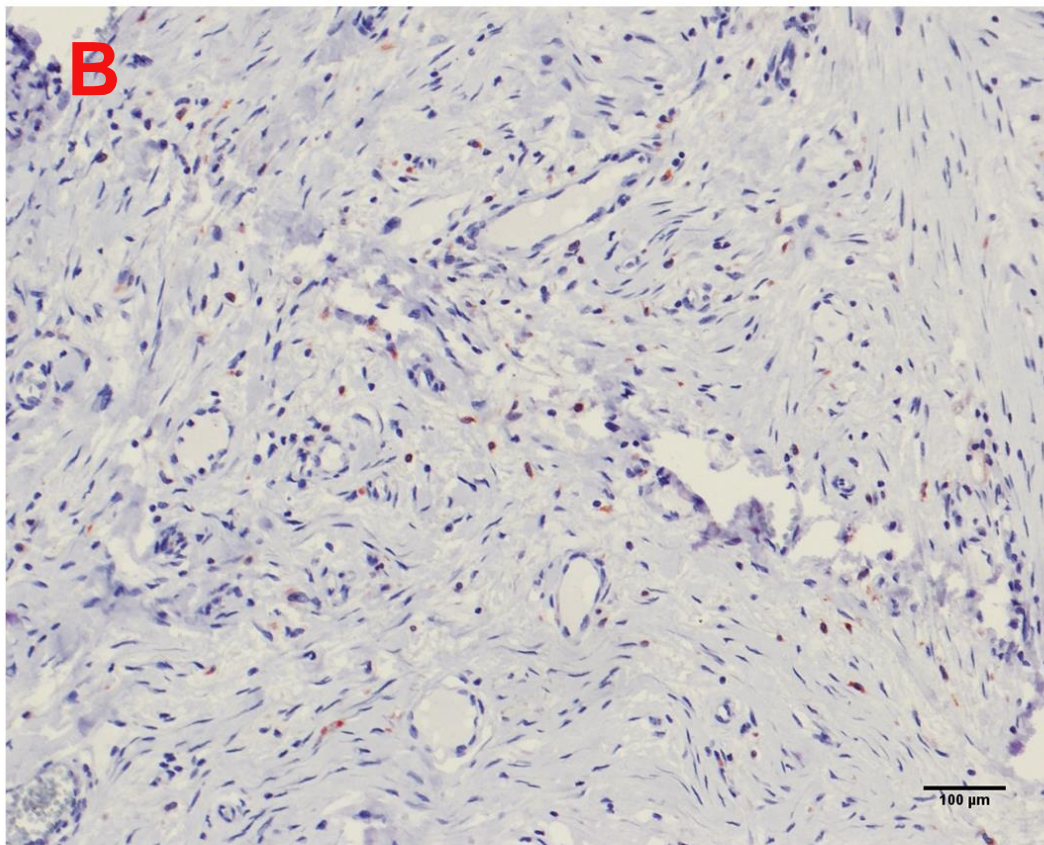
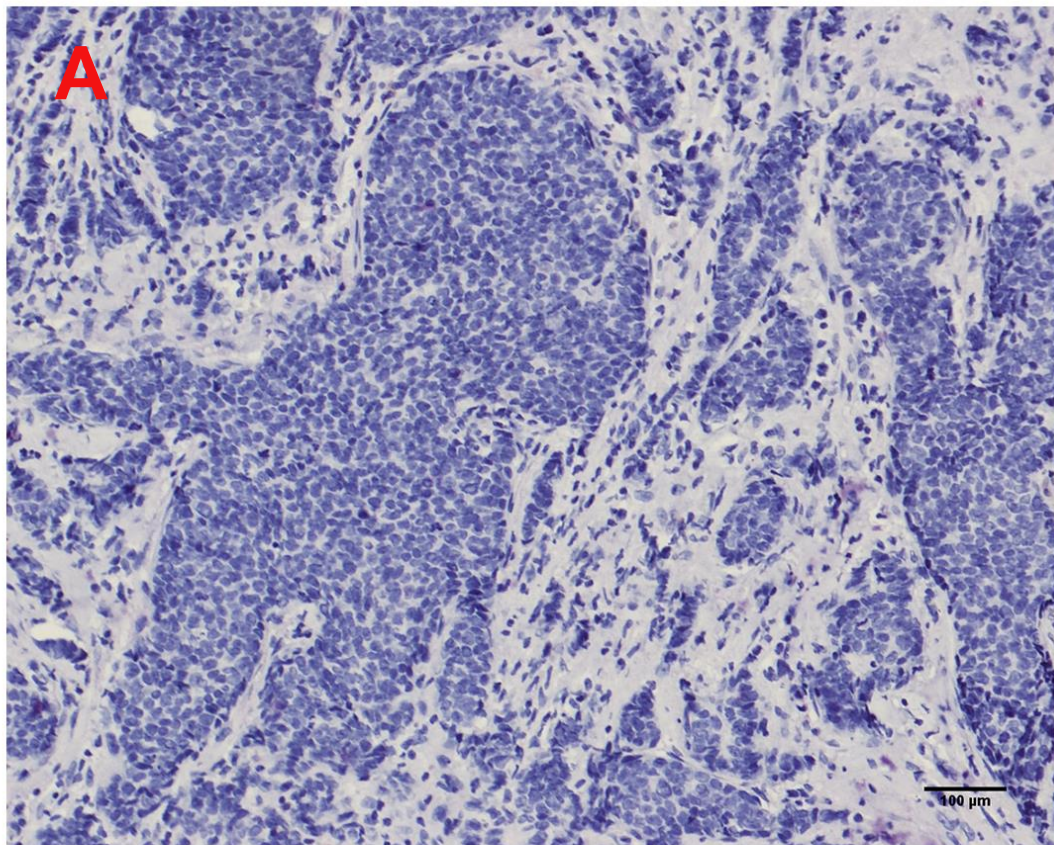
| Clinical and pathological parameters | Number of patients |
|--------------------------------------|--------------------|
| T stage                              |                    |
| T1                                   | 12                 |
| T2                                   | 8                  |
| T3                                   | 5                  |
| T4                                   | 3                  |
| N stage                              |                    |
| N0                                   | 10                 |
| N1                                   | 8                  |
| N2                                   | 3                  |
| N3                                   | 7                  |
| M stage                              |                    |
| M0                                   | 18                 |
| M1                                   | 10                 |
| ER                                   |                    |
| +                                    | 23                 |
| -                                    | 5                  |
| PR                                   |                    |
| +                                    | 21                 |
| -                                    | 7                  |
| HER2                                 |                    |
| +                                    | 5                  |
| -                                    | 23                 |
| Triple negative                      | 2                  |

Supplementary Table 3. Association of SI-CLP expression with clinico-pathological parameters of breast cancer patients (Russian cohort)

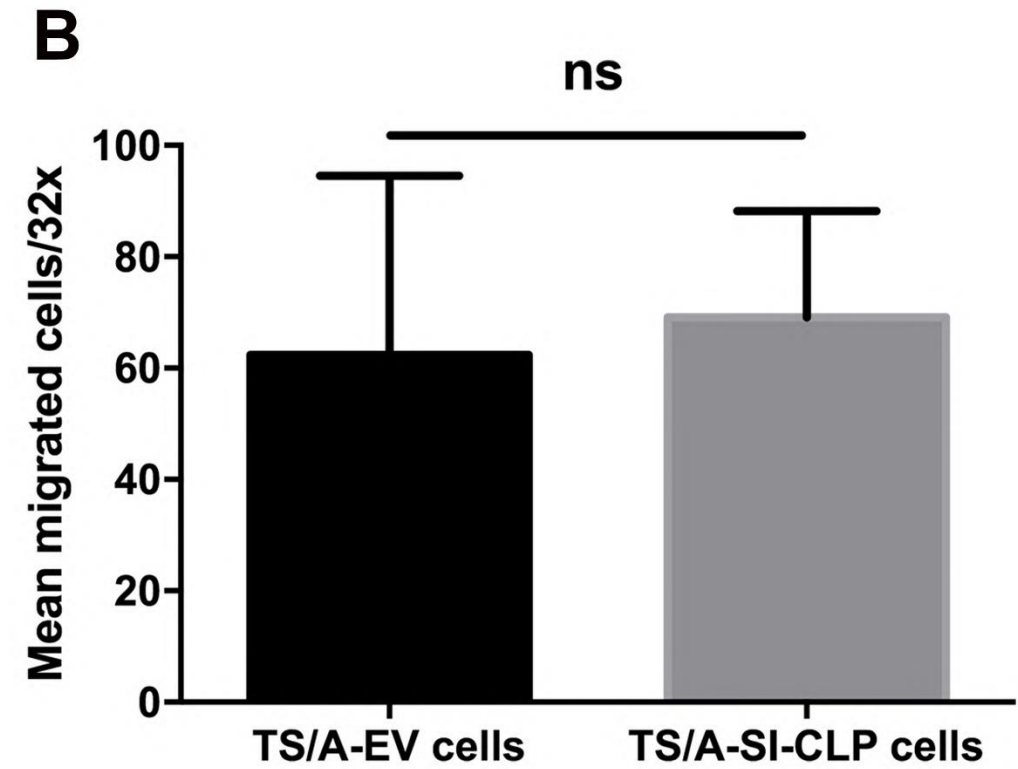
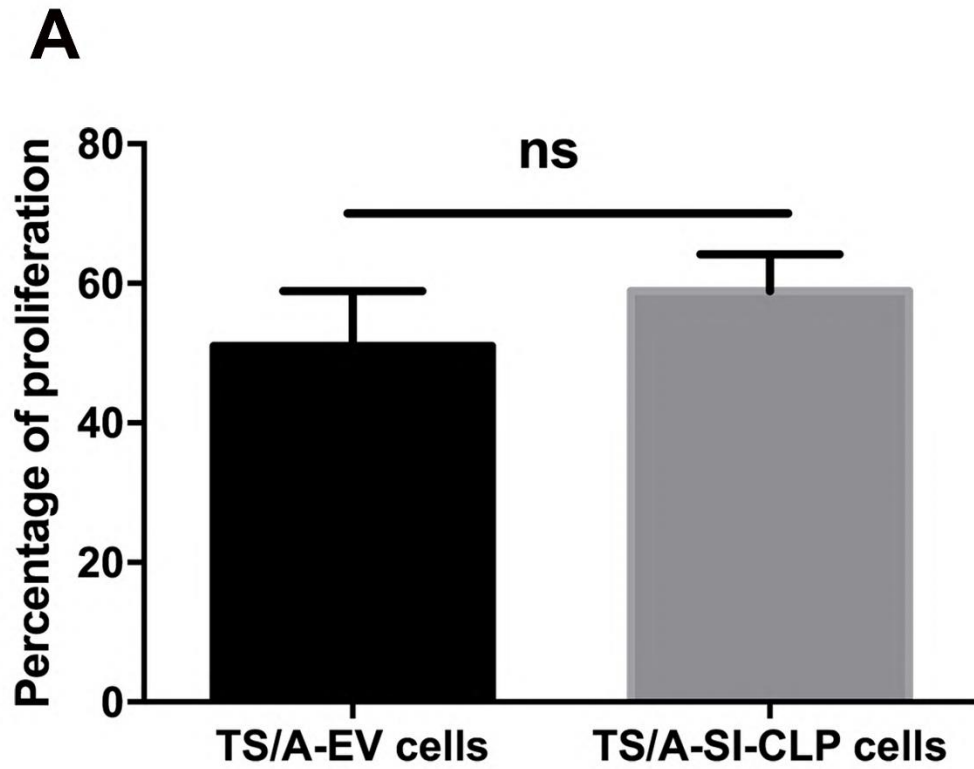
| Clinical and pathological parameters | Number of patients | Negative expression of SI-CLP, N of patients (%) | Positive expression of SI-CLP, N of patients (%) | P value  |
|--------------------------------------|--------------------|--|--|----------|
| Menstrual status                     |                    |  |  |          |
| Premenopausal                        | 7                  | 4 (15)   | 3 (11,5)   | p=0,684* |
| Postmenopausal                       | 45                 | 22 (85)  | 23 (88,5)  |          |
| Size of tumors                       |                    |  |  |          |
| T1                                   | 23                 | 11 (42)  | 12 (46)  | p=0,438# |
| T2                                   | 24                 | 14 (54)  | 10 (38,5)  |          |
| T3                                   | 1                  | 0 (0)  | 1 (4)  |          |
| T4                                   | 4                  | 1 (4)  | 3 (11,5)   |          |
| ER                                   |                    |  |  |          |
| +                                    | 39                 | 21 (81)  | 18 (69)  | p=0,261* |
| -                                    | 13                 | 5 (19)   | 8 (31)   |          |
| PR                                   |                    |  |  |          |
| +                                    | 30                 | 18 (69)  | 12 (46)  | p=0,079* |
| -                                    | 22                 | 8 (31)   | 14 (54)  |          |
| HER2                                 |                    |  |  |          |
| 0/+                                  | 40                 | 21 (81)  | 19 (73,5)  | p=0,802# |
| ++                                   | 5                  | 2 (8)  | 3 (11,5)   |          |
| +++                                  | 7                  | 3 (11)   | 4 (15)   |          |
| Molecular subtype                    |                    |  |  |          |
| Luminal A                            | 14                 | 8 (31)   | 6 (24)   | p=0,427# |
| Luminal B                            | 26                 | 14 (54)  | 12 (46)  |          |
| Triple-negative                      | 7                  | 3 (11)   | 4 (15)   |          |
| HER2-positive                        | 5                  | 1 (4)  | 4 (15)   |          |
| Degree of malignancy                 |                    |  |  |          |
| 1                                    | 4                  | 2 (8)  | 2 (8)  | p=0,743# |
| 2                                    | 40                 | 21 (81)  | 19 (73)  |          |
| 3                                    | 7                  | 3 (11)   | 4 (15)   |          |
| 4                                    | 1                  | 0 (0)  | 1 (4)  |          |
| Lymph node metastasis                |                    |  |  |          |
| Yes                                  | 23                 | 15 (58)  | 8 (31)   | p=0,053* |
| No                                   | 29                 | 11 (42)  | 18 (69)  |          |
| Hematogenous metastasis              |                    |  |  |          |
| Yes                                  | 5                  | 1 (4)  | 4 (15)   | p=0,158* |
| No                                   | 47                 | 25 (96)  | 22 (85)  |          |

P level—\*Fisher's exact test; #Chi-square test

# Supplementary Figure 1

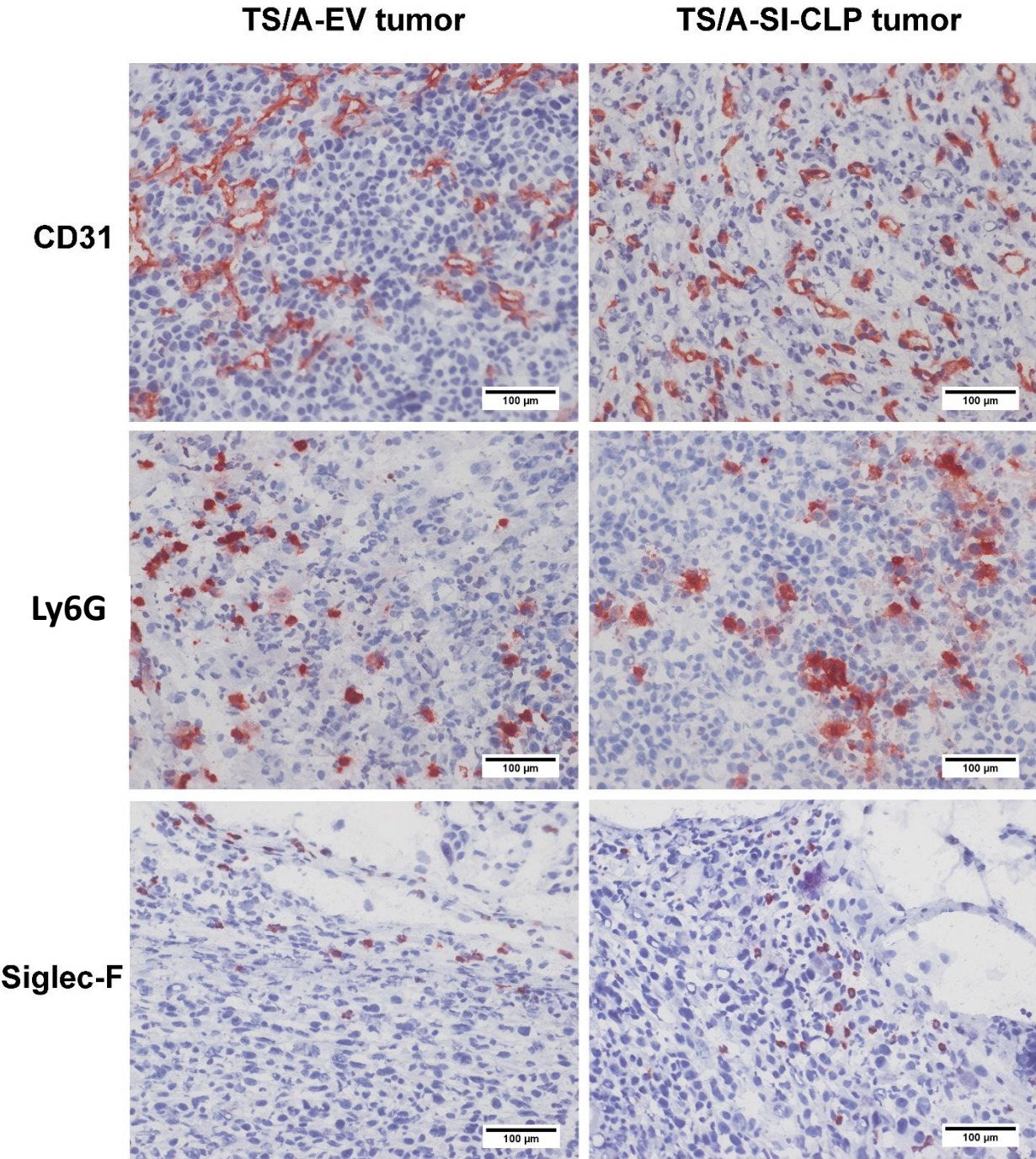


# Supplementary Figure 2



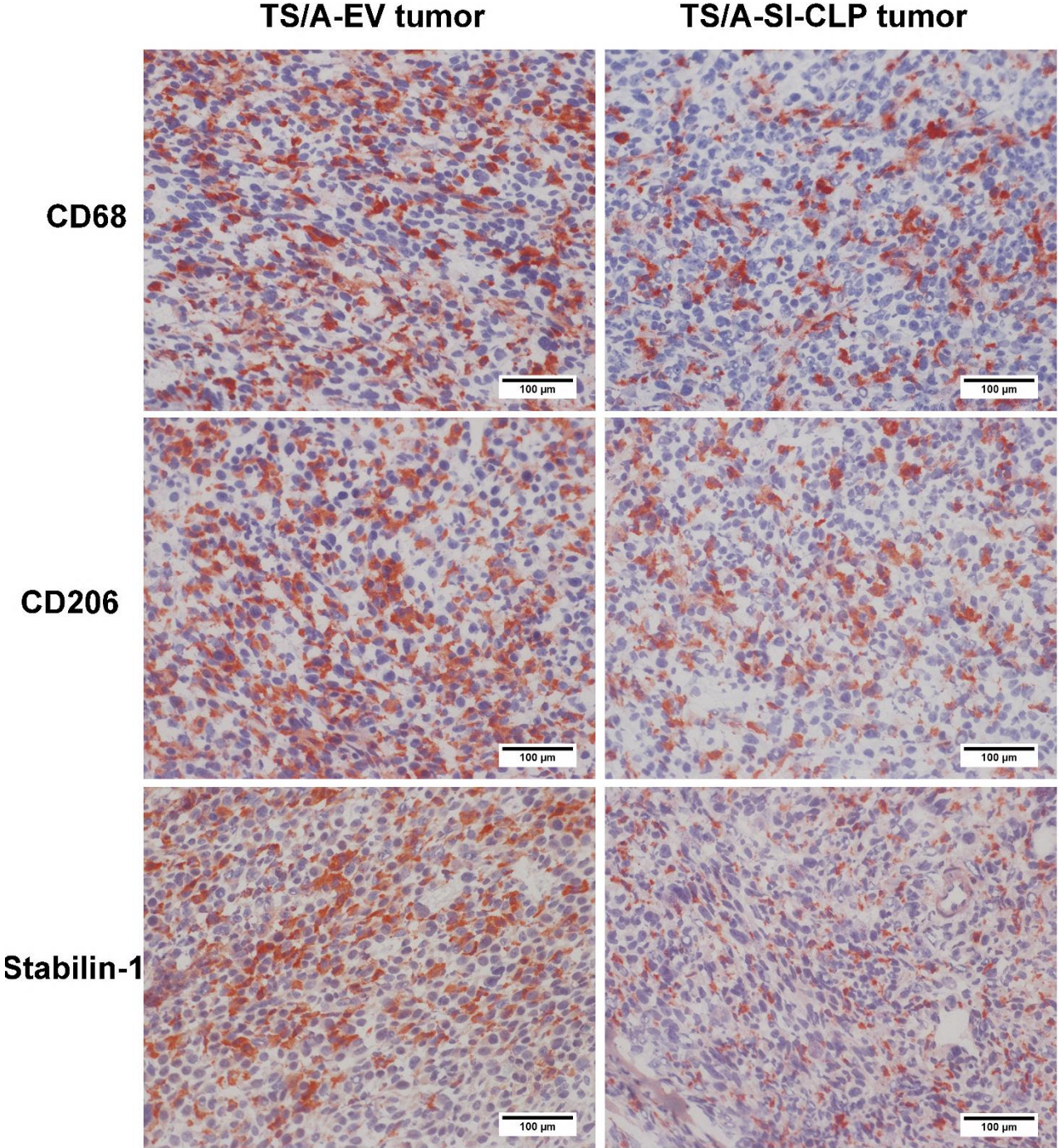


# Supplementary Figure 3



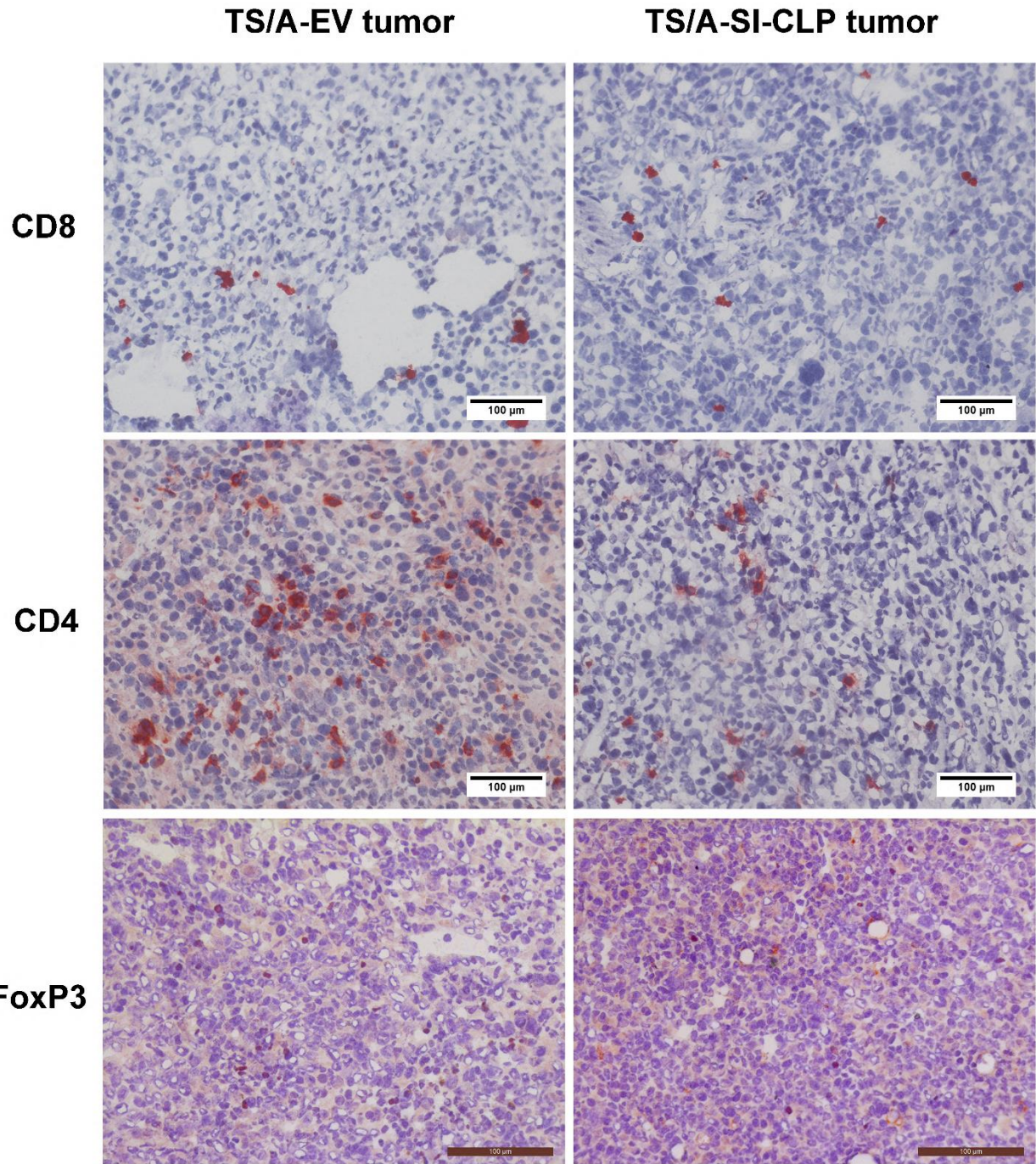


# Supplementary Figure 4



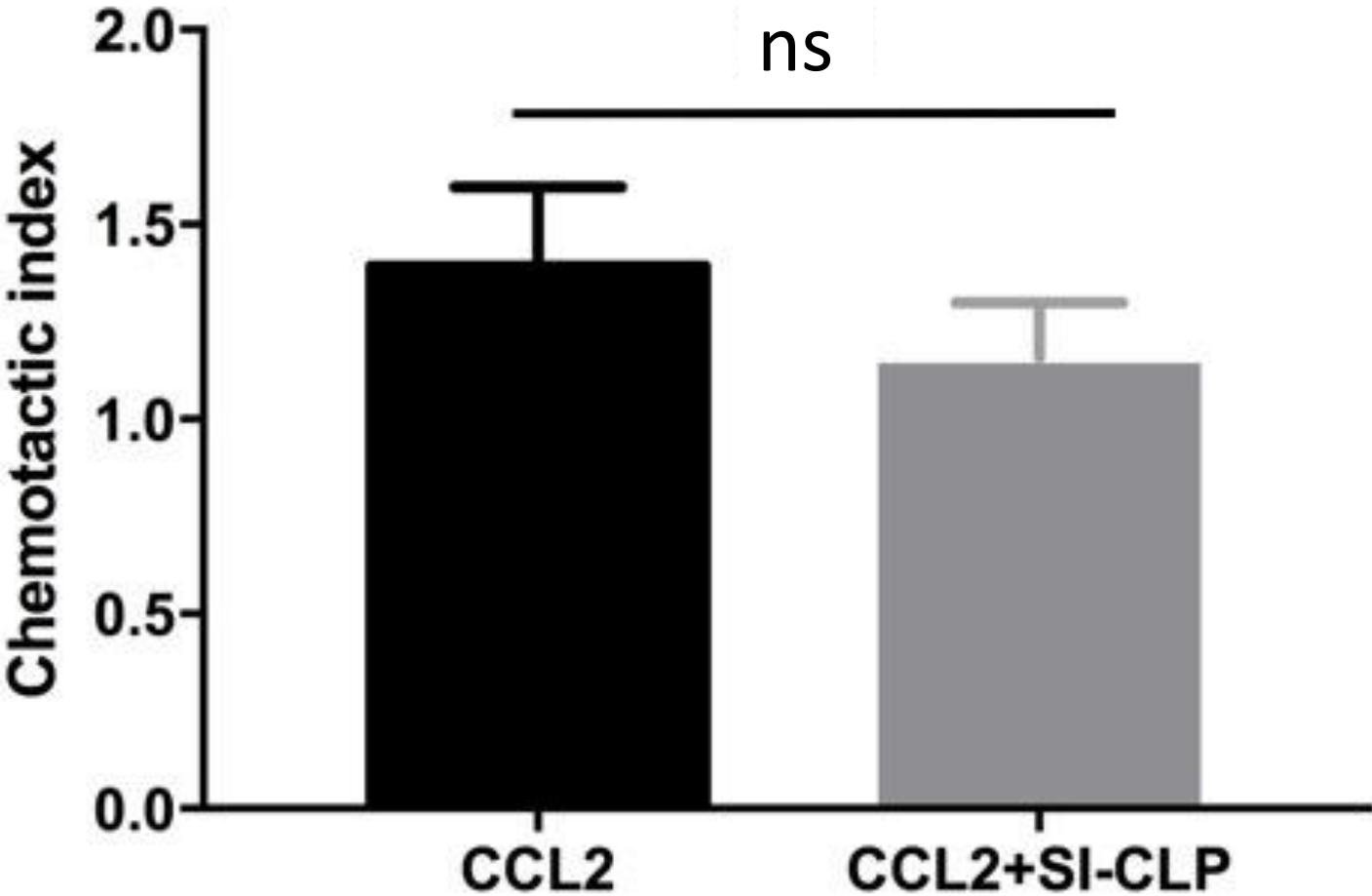


# Supplementary Figure 5

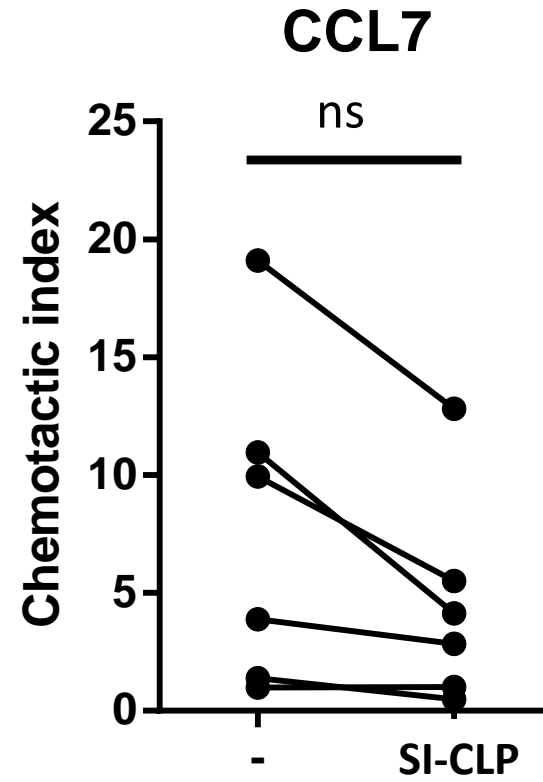
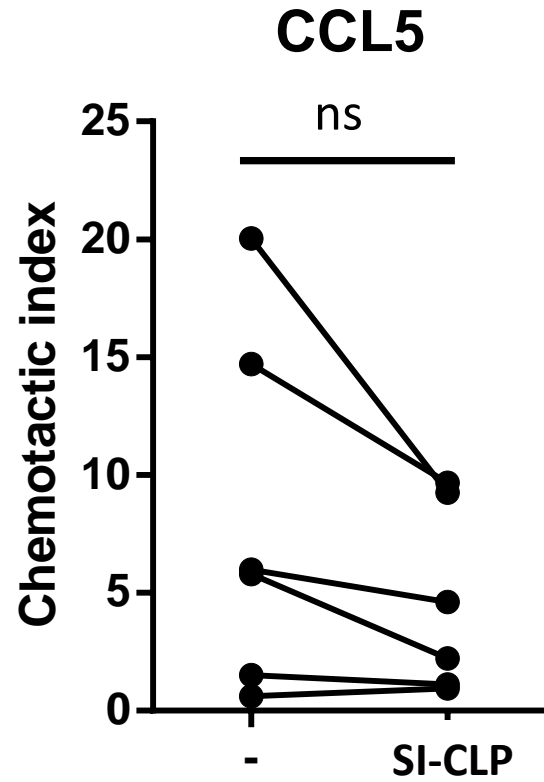




Supplementary Figure 6



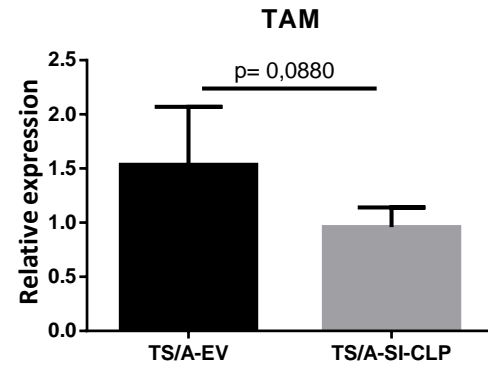
# Supplementary Figure 7



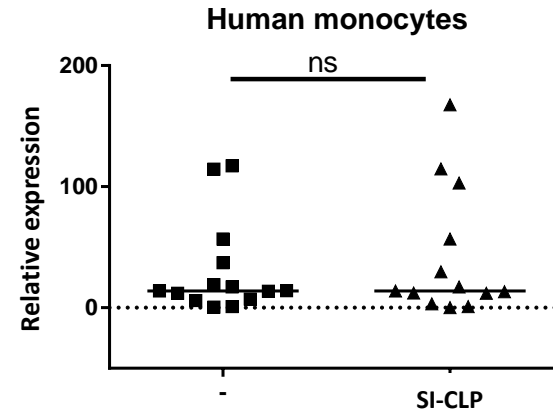


# Supplementary Figure 8

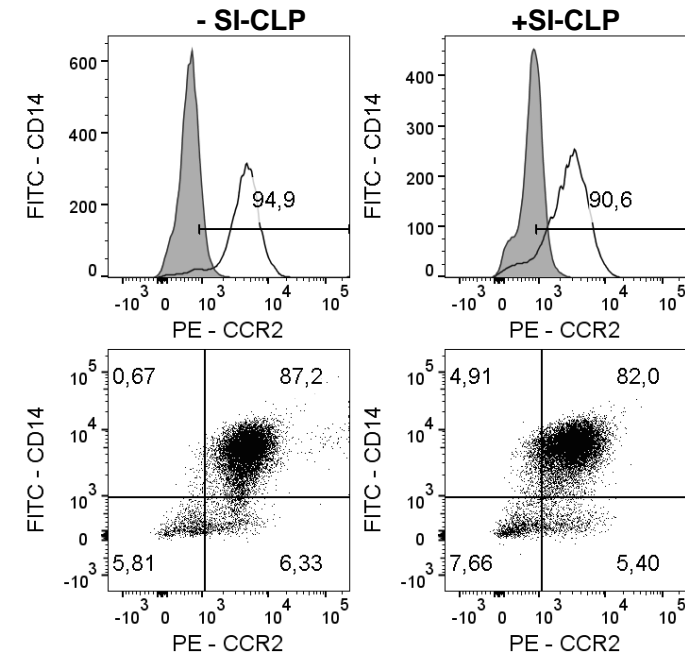
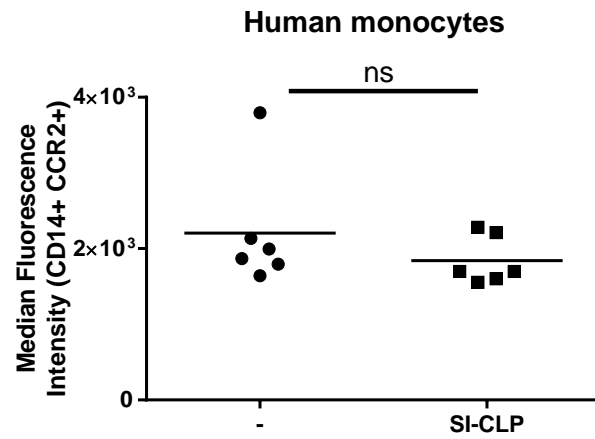
**A**



**B**

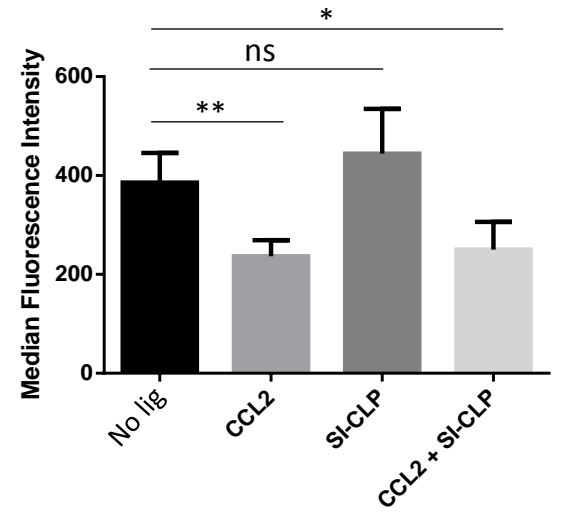


**C**

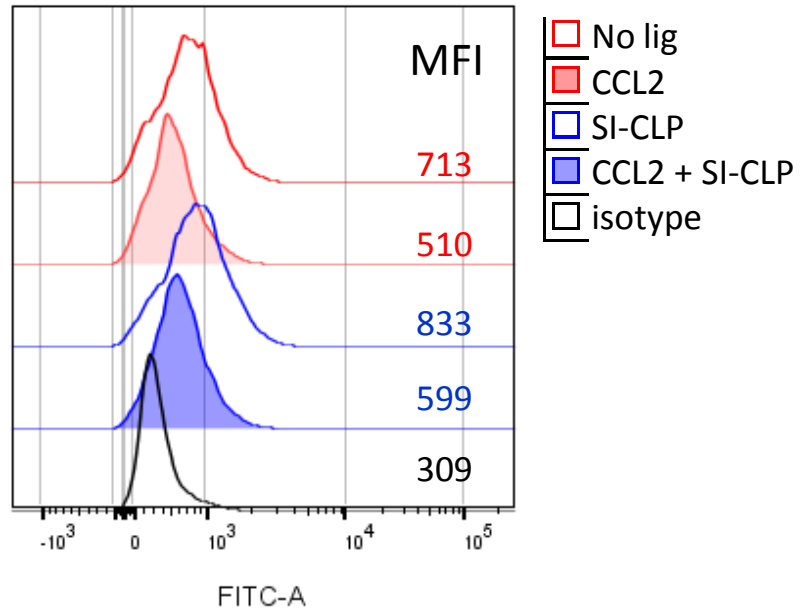


Supplementary Figure 9

A



B



C

