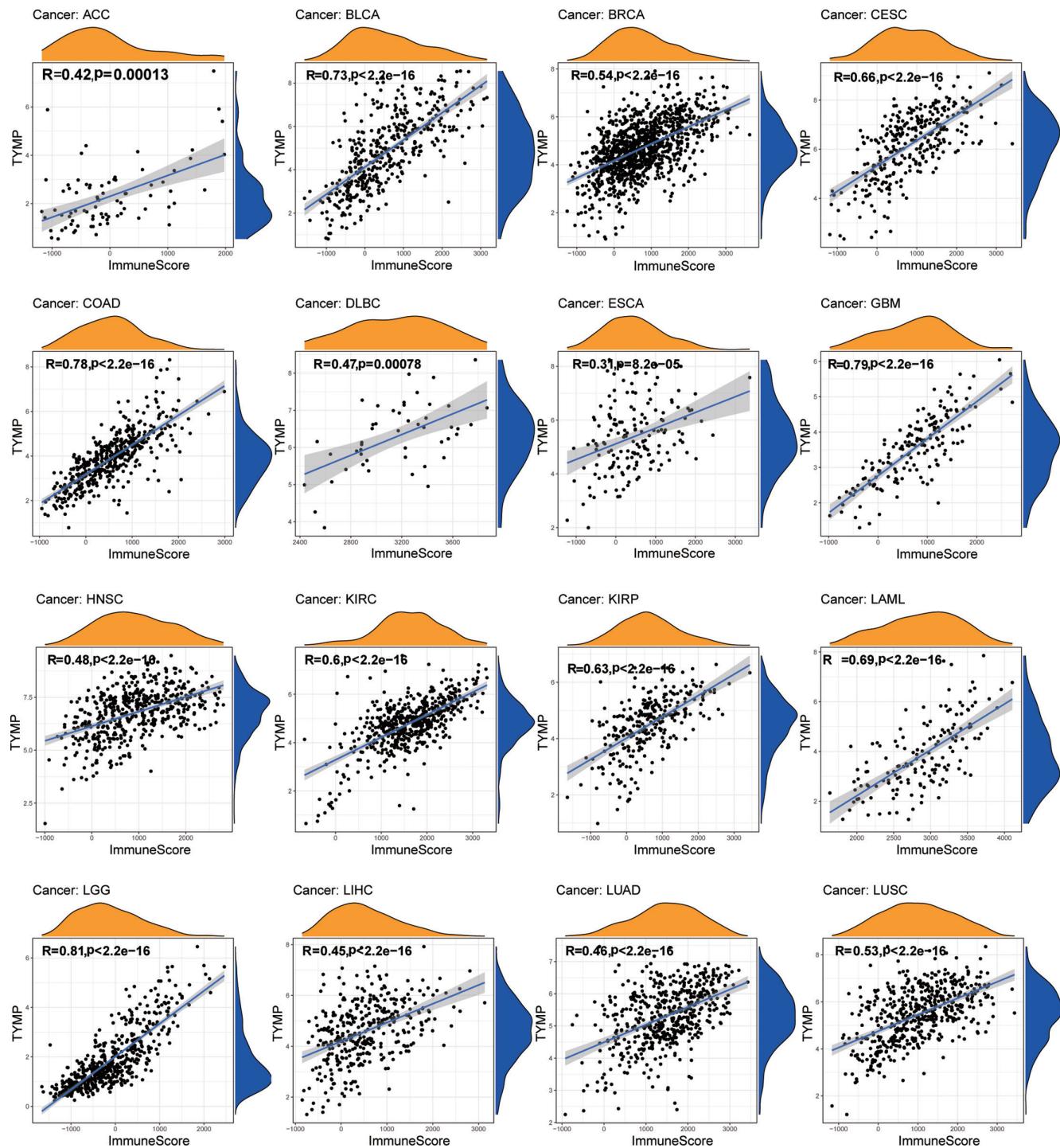


Supplementary



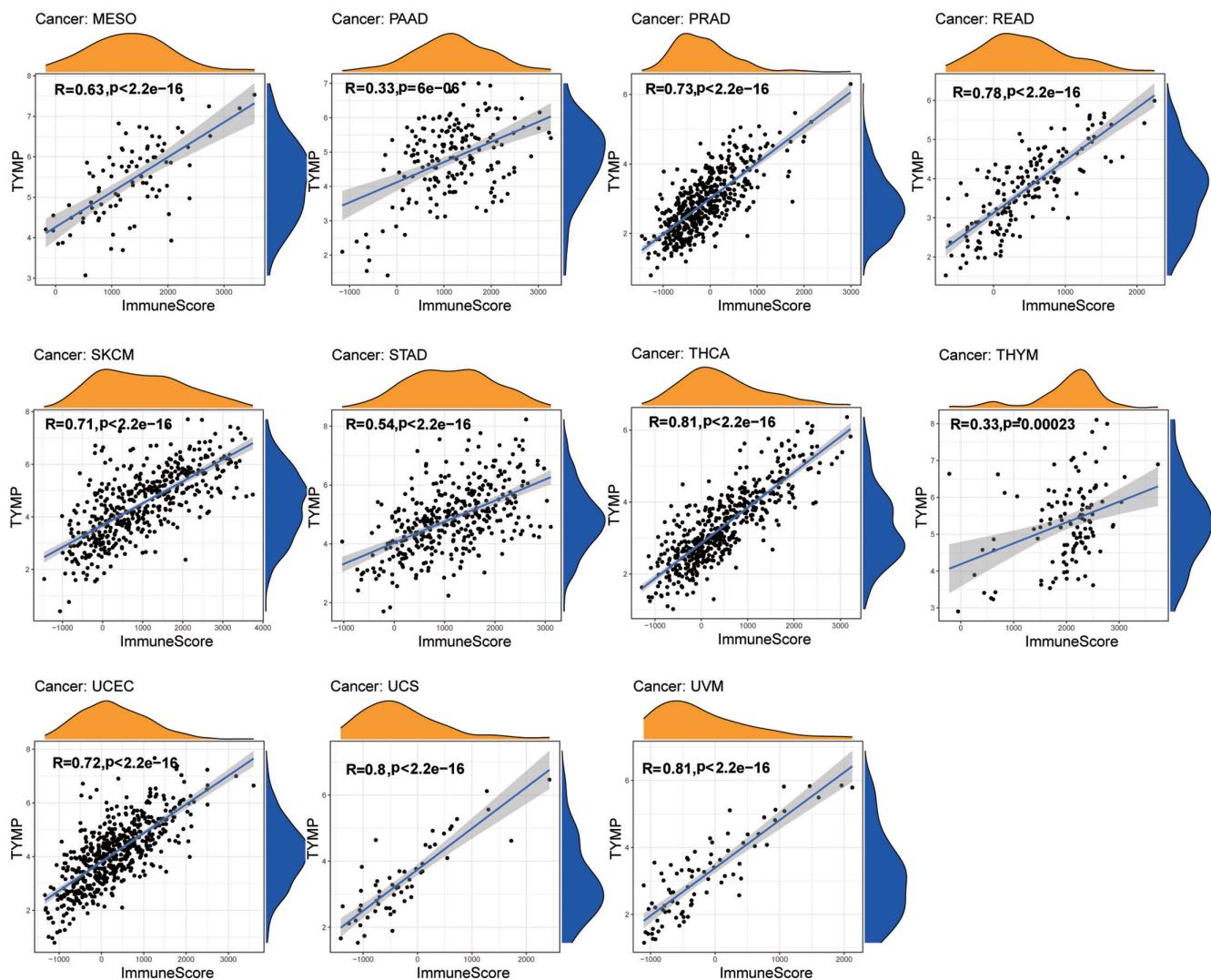
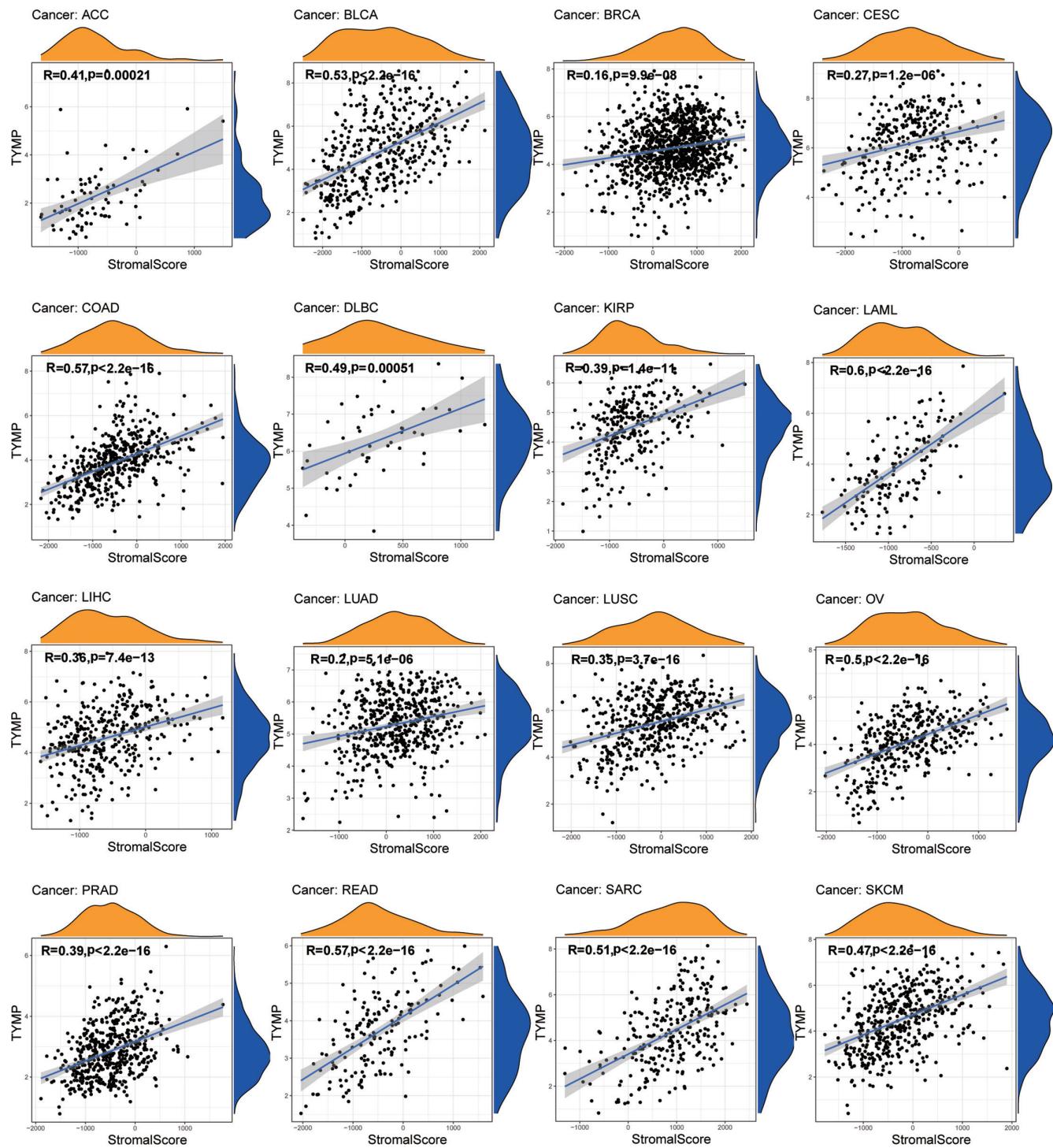


Figure S1 The significant results of correlation analyses of *TYMP* expression and immune cell scores in tumors. ACC, adrenocortical cancer; BLCA, bladder cancer; BRCA, breast cancer; CESC, cervical cancer; COAD, colon cancer; DLBC, large B-cell lymphoma; ESCA, esophageal cancer; GBM, glioblastoma; HNSC, head and neck cancer; KIRC, kidney clear cell carcinoma; KIRP, kidney papillary cell carcinoma; LAML, acute myeloid leukemia; LGG, lower grade glioma; LIHC, liver cancer; LUAD, lung adenocarcinoma; LUSC, lung squamous cell carcinoma; MESO, mesothelioma; PAAD, pancreatic cancer; PRAD, prostate adenocarcinoma; READ, rectal cancer; SKCM, skin cutaneous melanoma; STAD, stomach adenocarcinoma; THCA, thyroid cancer; THYM, thymoma; UCEC, endometrioid cancer; UCS, uterine carcinosarcoma; UVM, uveal melanomas.



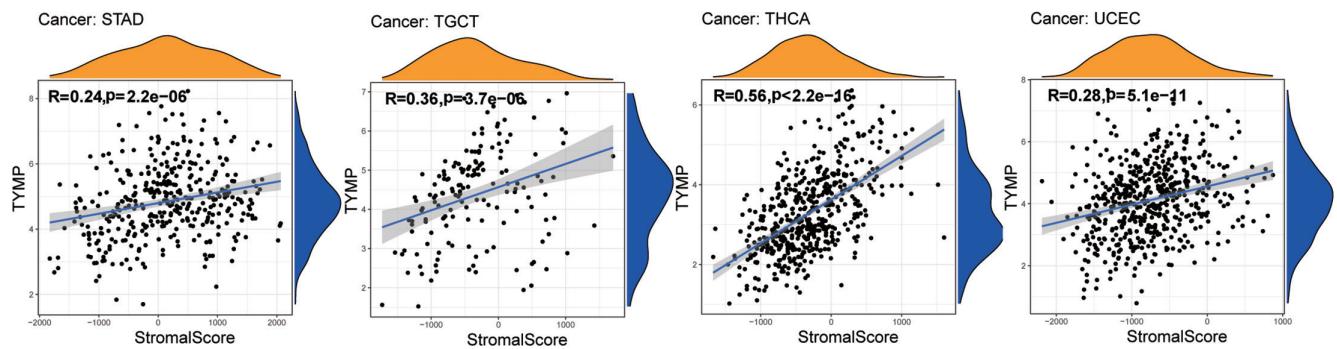


Figure S2 The significant results of correlations of *TYMP* expression and stromal cell scores in tumors. ACC, adrenocortical cancer; BLCA, bladder cancer; BRCA, breast cancer; CESC, cervical cancer; COAD, colon cancer; DLBC, large B-cell lymphoma; KIRP, kidney papillary cell carcinoma; LAML, acute myeloid leukemia; LIHC, liver cancer; LUAD, lung adenocarcinoma; LUSC, lung squamous cell carcinoma; OV, ovarian cancer; PRAD, prostate adenocarcinoma; READ, rectal cancer; SARC, sarcoma; SKCM, skin cutaneous melanoma; STAD, stomach adenocarcinoma; TGCT, testicular cancer; THCA, thyroid cancer; UCEC, endometrioid cancer.

Table S1 Association between *TYMP* expression and immune cell infiltration

| Cell type | ACC (P value/Cor) | BLCA (P value/Cor) | CHOL (P value/Cor) | COAD (P value/Cor) | DLBC (P value/Cor) | ESCA (P value/Cor) | HNSC (P value/Cor) | KICH (P value/Cor) | LAML (P value/Cor) | LGG (P value/Cor) | LIHC (P value/Cor) | LUAD (P value/Cor) | LUSC (P value/Cor) | MESO (P value/Cor) | OV (P value/Cor) | PAAD (P value/Cor) | PCPG (P value/Cor) | PRAD (P value/Cor) | READ (P value/Cor) | SARC (P value/Cor) | TGCT (P value/Cor) | THCA (P value/Cor) | THYM (P value/Cor) | UCEC (P value/Cor) | UCS (P value/Cor) | UVM (P value/Cor) | | |
|------------------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------|----------------------|----------|----------|
| Naïve B cells | -0.02 | **/-0.15 | -0.041 | 0.0068 | **/-0.53 | **/-0.35 | 0.12 | -0.033 | -0.27 | 0.019 | **/-0.4 | 0.069 | -0.047 | **/-0.16 | **/-0.15 | **/-0.32 | -0.08 | -0.037 | -0.074 | -0.035 | -0.026 | -0.074 | -0.047 | **/0.14 | **/0.25 | **/-0.14 | -0.3 | */-0.38 |
| Memory B cells | -0.08 | */-0.11 | 0.2 | -0.054 | 0.034 | **/0.32 | -0.012 | 0.0075 | 0 | -0.024 | 0.11 | 0.02 | 0 | **/0.15 | */0.11 | **/0.29 | 0.066 | **/0.22 | */0.25 | **/0.16 | 0.017 | 0 | -0.078 | 0.03 | 0.13 | **/0.13 | */0.35 | 0 |
| Plasma cells | 0.09 | -0.047 | 0.2 | 0.071 | 0 | -0.13 | 0.098 | **/-0.14 | 0.18 | */0.13 | -0.093 | 0 | 0.021 | 0.045 | 0.01 | 0.15 | **/0.2 | -0.1 | */0.22 | 0.058 | 0.049 | **/0.21 | 0.12 | **/0.4 | **/0.31 | **/0.21 | 0.06 | -0.038 |
| CD8 T cells | 0.17 | ***/0.21 | 0.14 | ***/0.34 | */0.34 | */0.2 | 0.12 | **/0.31 | */0.33 | ***/0.22 | 0.054 | **/0.31 | 0.076 | ***/0.25 | */0.11 | **/0.39 | ***/0.33 | -0.079 | 0.16 | ***/0.2 | ***/0.23 | ***/0.4 | */0.2 | ***/0.3 | 0.11 | **/0.26 | -0.034 | ***/0.66 |
| Naïve CD4 T cells | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | */-0.18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Resting CD4 memory T cells | **/-0.42 | -0.0013 | -0.2 | ***/-0.45 | -0.12 | ***/-0.38 | **/0.25 | ***/-0.23 | 0.054 | ***/-0.23 | ***/-0.41 | ***/0.18 | 0.062 | ***/-0.32 | -0.063 | ***/-0.49 | ***/-0.21 | **/-0.25 | ***/-0.37 | ***/-0.24 | ***/-0.38 | ***/-0.3 | 0.025 | ***/-0.19 | ***/-0.32 | ***/-0.32 | 0.027 | -0.18 |
| Activated CD4 memory T cells | */0.34 | ***/0.37 | */0.35 | -0.068 | 0.19 | 0.16 | ***/0.29 | ***/0.23 | 0 | 0.11 | 0.13 | 0 | */0.15 | ***/0.17 | ***/0.21 | ***/0.36 | ***/0.17 | -0.085 | ***/0.36 | ***/0.22 | */-0.2 | ***/0.41 | ***/0.41 | ***/0.42 | **/0.37 | 0.089 | 0.32 | ***/0.59 |
| Follicular T helper cells | **/0.42 | */0.11 | 0.21 | ***/0.23 | -0.037 | **/0.24 | **/-0.21 | ***/0.16 | 0.19 | -0.0025 | 0 | 0.048 | -0.01 | **/0.14 | 0.04 | 0.078 | 0.0012 | ***/0.26 | 0.16 | -0.034 | 0.15 | 0.043 | **/-0.22 | ***/0.32 | 0.12 | 0.03 | -0.3 | **/0.47 |
| Regulatory T cells | 0.17 | ***/-0.28 | */0.35 | **/0.13 | -0.077 | ***/-0.46 | 0 | 0.0094 | 0.13 | ***/0.23 | 0 | 0 | 0.1 | ***/0.15 | ***/0.18 | */0.28 | ***/0.26 | **/0.2 | **/0.25 | ***/0.29 | */0.16 | ***/0.27 | 0.095 | **/0.15 | -0.027 | **/0.12 | 0.077 | */0.37 |
| Gamma delta T cells | -0.2 | */-0.11 | 0 | 0 | 0.25 | 0 | 0.1 | 0 | -0.26 | 0 | ***/-0.35 | 0 | -0.11 | **/-0.13 | 0 | 0 | -0.11 | 0 | 0 | 0 | -0.022 | 0 | 0.049 | **/0.34 | -0.046 | -0.019 | 0.22 | |
| Resting NK cells | -0.044 | -0.013 | 0 | -0.048 | 0 | 0.012 | -0.064 | **/-0.14 | -0.14 | -0.11 | -0.049 | -0.088 | ***/-0.27 | 0 | -0.059 | 0 | 0 | -0.071 | 0.18 | 0 | -0.044 | 0 | 0 | **/-0.25 | -0.12 | -0.059 | -0.15 | -0.11 |
| Activated NK cells | -0.18 | ***/0.26 | -0.02 | ***/0.27 | */0.35 | ***/0.3 | -0.031 | **/0.36 | ***/-0.59 | -0.055 | 0.0042 | -0.069 | -0.12 | ***/0.27 | 0.081 | **/0.31 | 0.059 | */0.2 | **/-0.32 | 0.025 | */0.2 | 0.067 | */0.17 | -0.0086 | 0.15 | */0.11 | 0 | -0.16 |
| Monocytes | 0.052 | **/0.16 | 0.0037 | 0.048 | */0.3 | 0.1 | -0.084 | 0.073 | 0.29 | -0.067 | ***/0.68 | **/-0.17 | 0.016 | 0.069 | 0.068 | -0.15 | 0.044 | -0.13 | **/-0.24 | *0.13 | -0.03 | ***/0.22 | **/0.24 | 0.062 | 0.049 | **/0.2 | **/0.46 | -0.19 |
| M0 macrophages | */0.34 | -0.018 | -0.13 | -0.063 | 0.25 | -0.064 | 0.091 | **/-0.26 | 0.08 | ***/0.23 | 0 | ***/0.26 | 0.04 | 0.073 | **/-0.12 | 0.085 | ***/-0.31 | **/0.22 | **/0.31 | **/0.16 | -0.086 | -0.1 | -0.12 | ***/-0.32 | **/0.4 | **/-0.23 | **/-0.44 | -0.28 |
| M1 macrophages | 0.27 | ***/0.34 | -0.0053 | ***/0.4 | */0.35 | ***/0.33 | 0.07 | ***/0.39 | 0.076 | -0.068 | 0 | ***/0.37 | ***/0.18 | ***/0.24 | */0.1 | ***/0.48 | ***/0.27 | 0.089 | 0.21 | 0.0088 | **/0.24 | **/0.21 | ***/0.29 | **/0.38 | */0.23 | ***/0.28 | */0.42 | ***/0.66 |
| M2 macrophages | -0.12 | -0.021 | -0.079 | ***/0.16 | 0.17 | 0.12 | **/-0.19 | 0.015 | -0.12 | -0.049 | ***/0.28 | **/-0.22 | -0.05 | -0.038 | -0.082 | **/-0.26 | 0.028 | -0.0069 | -0.029 | -0.083 | **/0.25 | */-0.15 | **/-0.19 | ***/-0.37 | **/0.29 | **/0.18 | 0.27 | ***/0.59 |
| Resting dendritic cells | -0.024 | -0.086 | 0.11 | -0.046 | -0.13 | */0.19 | 0.062 | 0.034 | -0.039 | 0.014 | 0 | 0.018 | 0.1 | */-0.095 | -0.051 | 0.012 | **/0.17 | -0.14 | -0.095 | */0.12 | -0.016 | 0.11 | **/0.25 | 0.06 | **/-0.41 | 0.024 | 0.26 | 0.23 |
| Activated dendritic cells | -0.22 | -0.034 | 0.017 | -0.00072 | 0.12 | ***/0.31 | 0 | 0.035 | -0.15 | -0.079 | 0 | 0 | 0.091 | -0.03 | ***/0.15 | **/0.32 | -0.077 | ***/0.31 | -0.024 | ***/0.22 | 0.033 | **/0.19 | -0.045 | -0.098 | ***/0.39 | 0.018 | 0.22 | 0 |
| Resting mast cells | -0.21 | */-0.11 | 0.11 | */0.11 | -0.11 | 0.009 | -0.052 | */0.097 | -0.29 | -0.1 | ***/-0.29 | **/0.16 | **/-0.18 | -0.076 | -0.023 | 0.2 | 0.072 | */-0.2 | **/0.27 | ***/-0.3 | -0.043 | **/-0.19 | -0.041 | ***/-0.18 | 0.14 | -0.08 | 0.15 | -0.33 |
| Activated mast cells | 0.13 | -0.077 | -0.027 | -0.08 | 0 | -0.082 | 0.044 | ***/-0.24 | 0 | 0 | 0 | ***/-0.28 | 0 | 0 | 0.011 | 0 | **/-0.14 | 0 | 0 | 0.13 | 0 | 0 | 0 | -0.073 | 0 | 0 | 0 | |
| Eosinophils | 0.061 | 0.037 | 0 | -0.048 | 0 | 0 | -0.06 | 0 | */0.33 | 0 | ***/-0.35 | **/0.17 | 0 | */-0.11 | **/-0.13 | 0 | 0 | -0.11 | 0 | 0 | 0.19 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Neutrophils | 0.22 | ***/0.21 | 0.15 | ***/0.28 | 0 | -0.13 | **/0.23 | 0.06 | 0.3 | ***/0.29 | ***/0.32 | 0.099 | */0.13 | 0.052 | ***/0.2 | 0.13 | 0.073 | 0.15 | -0.0031 | 0 | 0 | ***/0.34 | 0 | 0 | 0 | **/0.13 | */0.34 | 0 |

*P<0.05; **P<0.01; ***P<0.001. ACC, adrenocortical cancer; BLCA, bladder cancer; BRCA, breast cancer; CESC, cervical cancer; COAD, colon cancer; DLBC, large B-cell lymphoma; ESCA, esophageal cancer; GBM, glioblastoma; HNSC, head and neck cancer; KIRC, kidney clear cell carcinoma; KIRP, kidney papillary cell carcinoma; LAML, acute myeloid leukemia; LGG, lower grade glioma; LIHC, liver cancer; LUAD, lung adenocarcinoma; LUSC, lung squamous cell carcinoma; MESO, mesothelioma; PAAD, pancreatic cancer; PRAD, prostate adenocarcinoma; READ, rectal cancer; SKCM, skin cutaneous melanoma; STAD, stomach adenocarcinoma; THCA, thyroid cancer; THYM, thymoma; UCEC, endometrioid cancer; UCS, uterine carcinosarcoma; UVM, uveal melanomas.