

Table SI. Correlation between CX3CL1 expression and other genes in lung adenocarcinoma.

| Gene symbol | Pearson correlation coefficient (r) | | | | | | | No. of datasets with r>0.4 |
|-------------|-------------------------------------|----------|----------|----------|----------|----------|----------|----------------------------|
| | TCGA | GSE14814 | GSE30219 | GSE37745 | GSE42127 | GSE50081 | GSE68465 | |
| CX3CL1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 |
| CCL22 | 0.455 | 0.405 | 0.447 | 0.375 | 0.417 | 0.403 | 0.434 | 6 |
| IL27RA | 0.522 | 0.413 | 0.516 | 0.56 | 0.34 | 0.401 | 0.372 | 5 |
| SLC34A2 | 0.483 | 0.409 | 0.428 | 0.576 | 0.428 | 0.321 | 0.337 | 5 |
| AQP1 | 0.495 | 0.356 | 0.433 | 0.457 | 0.429 | 0.438 | 0.231 | 5 |
| CAMK1 | 0.452 | 0.401 | 0.408 | 0.468 | 0.302 | 0.427 | 0.221 | 5 |
| ICAM1 | 0.547 | 0.516 | 0.59 | 0.525 | 0.128 | 0.384 | 0.432 | 5 |
| TIPARP | 0.403 | 0.39 | 0.562 | 0.521 | 0.548 | 0.291 | 0.512 | 5 |
| CD1C | 0.544 | 0.515 | 0.295 | 0.438 | 0.539 | 0.439 | 0.295 | 5 |
| CFLAR | 0.421 | 0.462 | 0.54 | 0.489 | 0.486 | 0.253 | 0.259 | 5 |
| CST6 | 0.517 | 0.466 | 0.497 | 0.626 | 0.021 | 0.466 | 0.278 | 5 |
| IFT57 | 0.459 | 0.42 | 0.429 | 0.448 | 0.416 | 0.122 | 0.219 | 5 |
| RRAD | 0.544 | 0.299 | 0.523 | 0.456 | 0.587 | 0.477 | 0.163 | 5 |
| SAMD4A | 0.491 | 0.413 | 0.563 | 0.54 | 0.284 | 0.418 | 0.289 | 5 |
| DPP4 | 0.553 | 0.441 | 0.572 | 0.505 | 0.388 | 0.309 | 0.383 | 4 |
| SPRED2 | 0.434 | 0.337 | 0.401 | 0.446 | 0.472 | 0.375 | 0.371 | 4 |
| CD1A | 0.524 | 0.34 | 0.421 | 0.445 | 0.494 | 0.374 | 0.245 | 4 |
| CDC42EP1 | 0.551 | 0.289 | 0.505 | 0.512 | 0.394 | 0.504 | 0.365 | 4 |
| FHOD1 | 0.431 | 0.319 | 0.53 | 0.528 | 0.322 | 0.458 | 0.248 | 4 |
| HLA-DPB1 | 0.472 | 0.341 | 0.416 | 0.502 | 0.456 | 0.365 | 0.173 | 4 |
| HLA-DQB2 | 0.553 | 0.334 | 0.405 | 0.444 | 0.514 | 0.32 | 0.204 | 4 |
| ITGA2 | 0.465 | 0.355 | 0.528 | 0.525 | 0.497 | 0.311 | 0.285 | 4 |
| MGLL | 0.493 | 0.346 | 0.428 | 0.43 | 0.532 | 0.304 | 0.269 | 4 |
| PLEKHM1 | 0.447 | 0.34 | 0.566 | 0.441 | 0.359 | 0.409 | 0.224 | 4 |
| PLS3 | 0.487 | 0.353 | 0.586 | 0.669 | 0.282 | 0.321 | 0.483 | 4 |
| ANXA1 | 0.438 | 0.138 | 0.625 | 0.685 | 0.504 | 0.144 | 0.357 | 4 |
| CDH3 | 0.417 | 0.402 | 0.437 | 0.544 | 0.286 | 0.281 | 0.326 | 4 |
| COL4A3 | 0.351 | 0.411 | 0.465 | 0.414 | 0.531 | 0.118 | 0.241 | 4 |
| DUSP6 | 0.536 | 0.268 | 0.496 | 0.524 | 0.5 | 0.354 | 0.282 | 4 |
| ESYT1 | 0.326 | 0.508 | 0.486 | 0.5 | - | 0.421 | 0.25 | 4 |
| GALNT10 | 0.516 | 0.276 | 0.5 | 0.604 | -0.029 | 0.489 | 0.326 | 4 |
| GLS | 0.406 | 0.404 | 0.344 | 0.49 | 0.448 | 0.133 | 0.16 | 4 |
| HPGDS | 0.553 | 0.403 | 0.507 | 0.529 | - | 0.394 | 0.288 | 4 |
| ITGB2 | 0.482 | 0.404 | 0.354 | 0.487 | 0.412 | 0.27 | 0.243 | 4 |
| MSN | 0.466 | 0.232 | 0.513 | 0.48 | 0.353 | 0.407 | 0.281 | 4 |
| SPRY2 | 0.457 | 0.223 | 0.433 | 0.571 | 0.433 | 0.242 | 0.359 | 4 |
| STAC | 0.489 | 0.358 | 0.527 | 0.416 | 0.203 | 0.486 | 0.248 | 4 |
| SYNPO | 0.454 | 0.317 | 0.505 | 0.498 | -0.052 | 0.416 | 0.194 | 4 |
| TK2 | 0.541 | 0.301 | 0.472 | 0.476 | 0.291 | 0.421 | 0.197 | 4 |
| TMEM173 | 0.579 | - | 0.369 | 0.54 | 0.548 | 0.497 | - | 4 |
| TNC | 0.478 | 0.231 | 0.463 | 0.624 | 0.45 | 0.394 | 0.274 | 4 |
| TNIK | 0.492 | 0.456 | 0.414 | 0.428 | 0.304 | 0.287 | 0.298 | 4 |
| ZNF462 | 0.49 | - | 0.569 | 0.362 | 0.543 | 0.423 | - | 4 |
| ARHGAP31 | 0.444 | - | 0.534 | 0.478 | - | 0.484 | - | 4 |
| FCGBP | 0.547 | 0.262 | 0.47 | 0.517 | 0.082 | 0.425 | 0.144 | 4 |
| FLNA | 0.496 | 0.102 | 0.534 | 0.598 | 0.171 | 0.544 | 0.275 | 4 |
| MEGF6 | 0.44 | 0.225 | 0.432 | 0.422 | - | 0.428 | 0.166 | 4 |
| TMEM43 | 0.492 | 0.286 | 0.565 | 0.549 | 0.491 | 0.289 | 0.239 | 4 |
| CDC42EP3 | 0.487 | 0.374 | 0.619 | 0.561 | 0.325 | 0.359 | 0.322 | 3 |
| CD207 | 0.539 | 0.343 | 0.331 | 0.427 | 0.495 | 0.374 | 0.258 | 3 |
| CD83 | 0.478 | 0.391 | 0.34 | 0.422 | 0.462 | 0.329 | 0.293 | 3 |
| FGFBP1 | 0.378 | 0.485 | 0.426 | 0.48 | 0.247 | 0.329 | 0.37 | 3 |
| HLA-DMA | 0.435 | 0.397 | 0.359 | 0.466 | 0.457 | 0.343 | 0.185 | 3 |
| HLF | 0.495 | 0.348 | 0.37 | 0.486 | 0.408 | 0.306 | 0.257 | 3 |

Table SI. Continued.

| Gene symbol | Pearson correlation coefficient (r) | | | | | | | No. of datasets with r>0.4 |
|-------------|-------------------------------------|----------|----------|----------|----------|----------|----------|----------------------------|
| | TCGA | GSE14814 | GSE30219 | GSE37745 | GSE42127 | GSE50081 | GSE68465 | |
| IDS | 0.541 | 0.339 | 0.572 | 0.522 | 0.368 | 0.348 | 0.286 | 3 |
| KCNK5 | 0.526 | 0.314 | 0.437 | 0.421 | 0.395 | 0.33 | 0.29 | 3 |
| LDOC1 | 0.365 | 0.436 | 0.509 | 0.488 | 0.309 | 0.274 | 0.325 | 3 |
| MMP28 | 0.407 | 0.369 | 0.493 | 0.571 | 0.357 | 0.305 | 0.239 | 3 |
| MVP | 0.405 | 0.38 | 0.388 | 0.633 | 0.406 | 0.366 | 0.197 | 3 |
| RAB38 | 0.425 | 0.324 | 0.361 | 0.653 | 0.246 | 0.336 | 0.477 | 3 |
| AHNAK | 0.323 | 0.068 | 0.426 | 0.436 | 0.462 | 0.371 | 0.243 | 3 |
| AMIGO2 | 0.456 | 0.314 | 0.47 | 0.398 | -0.123 | 0.285 | 0.436 | 3 |
| ATP13A4 | 0.502 | - | 0.554 | 0.445 | 0.343 | 0.309 | - | 3 |
| BEAN1 | - | 0.423 | 0.566 | 0.6 | - | 0.307 | 0.375 | 3 |
| C1orf116 | 0.457 | 0.392 | 0.422 | 0.459 | 0.397 | 0.213 | 0.22 | 3 |
| CD97 | 0.359 | 0.305 | 0.457 | 0.495 | 0.429 | 0.281 | 0.12 | 3 |
| CPNE2 | 0.505 | - | 0.481 | 0.527 | 0.324 | 0.354 | - | 3 |
| CYR61 | 0.388 | 0.035 | 0.437 | 0.546 | 0.428 | 0.223 | 0.31 | 3 |
| DCUN1D3 | 0.326 | - | 0.432 | 0.638 | 0.333 | 0.444 | - | 3 |
| FOXQ1 | 0.406 | - | 0.394 | 0.509 | 0.473 | 0.392 | - | 3 |
| IFI44L | 0.407 | 0.33 | 0.361 | 0.47 | 0.468 | 0.214 | 0.118 | 3 |
| MAPKAPK3 | 0.437 | 0.355 | 0.362 | 0.499 | 0.452 | 0.276 | 0.138 | 3 |
| MET | - | 0.428 | 0.555 | 0.652 | 0.308 | 0.283 | 0.334 | 3 |
| MYO1G | 0.522 | - | 0.415 | 0.426 | 0.369 | 0.324 | - | 3 |
| NAPSA | 0.434 | - | 0.451 | 0.468 | 0.4 | 0.318 | - | 3 |
| PLAT | 0.414 | 0.022 | 0.439 | 0.465 | 0.351 | 0.378 | 0.066 | 3 |
| PTPN13 | 0.463 | 0.313 | 0.459 | 0.446 | 0.387 | 0.088 | 0.211 | 3 |
| RGS3 | 0.498 | 0.293 | 0.459 | 0.509 | 0.081 | 0.385 | 0.375 | 3 |
| SDC4 | 0.416 | 0.253 | 0.556 | 0.522 | 0.381 | 0.361 | 0.285 | 3 |
| SH3RF2 | 0.431 | - | 0.364 | 0.468 | 0.479 | 0.347 | - | 3 |
| SLC15A3 | 0.412 | 0.363 | 0.337 | 0.45 | 0.453 | 0.28 | 0.17 | 3 |
| SLC1A7 | 0.514 | 0.346 | 0.458 | 0.24 | 0.442 | 0.356 | 0.221 | 3 |
| STK17A | 0.496 | 0.362 | 0.449 | 0.564 | 0.112 | 0.219 | 0.302 | 3 |
| VAV1 | 0.404 | 0.396 | 0.469 | 0.473 | 0.282 | 0.392 | 0.268 | 3 |
| AIM1 | 0.514 | 0.366 | 0.546 | 0.614 | 0.078 | 0.296 | 0.262 | 3 |
| ANK3 | 0.438 | 0.459 | 0.384 | 0.509 | 0.052 | 0.175 | 0.278 | 3 |
| APLP2 | 0.436 | 0.243 | 0.424 | 0.594 | 0.267 | 0.289 | 0.317 | 3 |
| ARHGEF3 | 0.324 | 0.143 | 0.454 | 0.412 | 0.442 | 0.044 | 0.128 | 3 |
| ARL6IP5 | 0.418 | 0.152 | 0.55 | 0.434 | 0.29 | 0.219 | 0.323 | 3 |
| CH25H | 0.465 | 0.055 | 0.191 | 0.505 | 0.428 | 0.369 | 0.168 | 3 |
| EDNRA | 0.434 | 0.111 | 0.512 | 0.483 | 0.272 | 0.33 | 0.116 | 3 |
| FAS | 0.487 | 0.271 | 0.508 | 0.582 | 0.317 | 0.193 | 0.201 | 3 |
| GNAI2 | 0.515 | 0.185 | 0.522 | 0.451 | 0.374 | 0.288 | 0.237 | 3 |
| GPR116 | 0.454 | 0.241 | 0.39 | 0.519 | 0.476 | 0.214 | 0.241 | 3 |
| GRAMD3 | 0.488 | 0.245 | 0.415 | 0.45 | 0.359 | 0.121 | 0.3 | 3 |
| HLA-DQB1 | - | 0.42 | 0.441 | 0.505 | - | 0.346 | 0.221 | 3 |
| ITGA3 | 0.471 | 0.265 | 0.385 | 0.56 | 0.171 | 0.494 | 0.296 | 3 |
| ITGAM | 0.43 | 0.425 | 0.402 | 0.384 | 0.259 | 0.263 | 0.181 | 3 |
| LY86 | 0.402 | 0.329 | 0.295 | 0.432 | 0.403 | 0.276 | 0.206 | 3 |
| MAMLD1 | 0.368 | 0.111 | 0.589 | 0.468 | - | 0.46 | 0.196 | 3 |
| MYD88 | 0.435 | 0.284 | 0.552 | 0.411 | 0.27 | 0.346 | 0.262 | 3 |
| NAPSB | 0.53 | - | 0.434 | 0.516 | 0.236 | 0.331 | - | 3 |
| PAG1 | 0.5 | - | 0.509 | 0.451 | 0.375 | 0.126 | - | 3 |
| PARP3 | 0.476 | 0.298 | 0.471 | 0.477 | 0.167 | 0.373 | 0.297 | 3 |
| PHLDA3 | 0.429 | 0.267 | 0.466 | 0.488 | 0.233 | 0.331 | 0.207 | 3 |
| RAC2 | 0.42 | 0.405 | 0.211 | 0.435 | 0.328 | 0.236 | 0.16 | 3 |
| ROS1 | 0.485 | 0.226 | 0.392 | 0.46 | 0.55 | 0.179 | 0.106 | 3 |
| S100A6 | 0.262 | 0.14 | 0.455 | 0.515 | 0.523 | 0.347 | 0.219 | 3 |

Table SI. Continued.

| Gene symbol | Pearson correlation coefficient (r) | | | | | | | No. of datasets with r>0.4 |
|-------------|-------------------------------------|----------|----------|----------|----------|----------|----------|----------------------------|
| | TCGA | GSE14814 | GSE30219 | GSE37745 | GSE42127 | GSE50081 | GSE68465 | |
| SHROOM4 | 0.54 | - | 0.406 | 0.377 | 0.605 | 0.248 | - | 3 |
| SLC27A1 | 0.431 | - | 0.399 | 0.521 | 0.475 | 0.257 | - | 3 |
| SNX21 | 0.418 | - | 0.393 | 0.455 | 0.208 | 0.405 | - | 3 |
| SNX25 | 0.437 | - | 0.404 | 0.466 | 0.365 | 0.096 | - | 3 |
| SPRED1 | 0.532 | - | 0.488 | 0.592 | 0.395 | 0.21 | - | 3 |
| TCEAL3 | 0.408 | - | 0.465 | 0.319 | 0.44 | 0.228 | - | 3 |
| ZBTB46 | 0.399 | - | 0.466 | 0.402 | - | 0.428 | - | 3 |
| ZFP36L1 | 0.54 | -0.096 | 0.572 | 0.377 | 0.297 | 0.448 | 0.222 | 3 |
| AHR | 0.414 | 0.233 | 0.554 | 0.492 | 0.247 | 0.064 | 0.109 | 3 |
| CTSO | 0.509 | 0.178 | 0.417 | 0.47 | 0.235 | 0.188 | 0.223 | 3 |
| EMB | 0.512 | - | 0.528 | 0.536 | -0.054 | 0.072 | - | 3 |
| FAT4 | 0.448 | 0.058 | 0.453 | 0.442 | 0.143 | 0.217 | 0.145 | 3 |
| FYN | 0.407 | 0.406 | 0.453 | 0.208 | 0.267 | 0.276 | 0.212 | 3 |
| HOXD1 | 0.476 | 0.517 | 0.177 | 0.253 | 0.503 | 0.205 | 0.069 | 3 |
| HPGD | 0.481 | 0.196 | 0.206 | 0.401 | 0.422 | 0.213 | 0.266 | 3 |
| HRCT1 | 0.259 | - | 0.405 | 0.445 | - | 0.458 | - | 3 |
| KCNN4 | 0.45 | 0.248 | 0.403 | 0.534 | 0.219 | 0.176 | 0.171 | 3 |
| LOC284578 | 0.556 | - | 0.519 | 0.441 | - | 0.173 | - | 3 |
| MFSD4 | 0.56 | - | 0.457 | 0.516 | 0.089 | 0.237 | - | 3 |
| PAPLN | 0.457 | - | 0.293 | 0.406 | 0.284 | 0.436 | - | 3 |
| PDLIM4 | 0.528 | 0.284 | 0.281 | 0.562 | 0.098 | 0.485 | 0.265 | 3 |
| SGMS2 | 0.431 | - | 0.415 | 0.502 | - | -0.029 | - | 3 |
| SMURF2 | 0.474 | 0.068 | 0.571 | 0.517 | 0.017 | 0.223 | 0.212 | 3 |
| VIM | 0.431 | 0.066 | 0.299 | 0.453 | 0.405 | 0.075 | 0.193 | 3 |

Table SII. Correlation between CX3CL1 expression and other genes in lung squamous cell carcinoma.

| Gene symbol | Pearson correlation coefficient (r) | | | | | | No. of datasets with r>0.4 |
|--------------|-------------------------------------|----------|----------|----------|----------|----------|----------------------------|
| | TCGA | GSE50081 | GSE42127 | GSE37745 | GSE30219 | GSE14814 | |
| CX3CL1 | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| CPNE2 | 0.404 | 0.633 | 0.385 | 0.523 | 0.613 | - | 4 |
| PLLP | 0.389 | 0.575 | - | 0.53 | 0.55 | 0.481 | 4 |
| HEY1 | 0.354 | 0.518 | 0.139 | 0.433 | 0.333 | 0.576 | 3 |
| SUN2 | 0.313 | 0.479 | - | 0.452 | 0.48 | 0.368 | 3 |
| NDRG4 | 0.291 | 0.3 | 0.175 | 0.425 | 0.475 | 0.423 | 3 |
| COMT | 0.105 | 0.569 | 0.25 | 0.45 | 0.352 | 0.337 | 2 |
| NOL12 | - | 0.518 | - | 0.372 | 0.35 | 0.499 | 2 |
| PDLIM1 | 0.259 | 0.468 | 0.328 | 0.412 | 0.21 | 0.399 | 2 |
| BAG3 | 0.255 | 0.5 | 0.387 | 0.299 | 0.081 | 0.408 | 2 |
| CDC42EP1 | 0.248 | 0.401 | 0.241 | 0.375 | 0.274 | 0.472 | 2 |
| CHST7 | 0.283 | 0.332 | 0.197 | 0.19 | 0.448 | 0.422 | 2 |
| FBXW4 | 0.212 | 0.578 | 0.344 | 0.16 | 0.25 | 0.476 | 2 |
| ITPKB | 0.224 | 0.457 | 0.441 | 0.222 | 0.263 | 0.393 | 2 |
| KIAA1683 | 0.115 | 0.453 | 0.417 | 0.302 | 0.186 | - | 2 |
| LDLR | 0.216 | 0.14 | 0.589 | 0.318 | 0.134 | 0.445 | 2 |
| MYH9 | 0.168 | 0.155 | 0.4 | 0.447 | 0.134 | 0.458 | 2 |
| NRSN2 | 0.128 | 0.471 | - | 0.319 | 0.524 | 0.02 | 2 |
| PLXNB2 | 0.26 | 0.504 | 0.267 | 0.429 | 0.201 | 0.305 | 2 |
| RAB7B | - | 0.34 | 0.442 | 0.49 | 0.151 | - | 2 |
| SERTAD1 | 0.086 | 0.327 | 0.524 | 0.434 | -0.237 | - | 2 |
| SLC25A1 | 0.062 | 0.451 | 0.129 | 0.349 | 0.078 | 0.462 | 2 |
| SOX7 | 0.153 | 0.349 | 0.46 | 0.417 | 0.072 | - | 2 |
| UBTD1 | 0.213 | 0.336 | 0.416 | 0.462 | 0.117 | -0.042 | 2 |
| VIPR1 | 0.203 | 0.402 | 0.402 | 0.377 | 0.259 | 0.099 | 2 |
| FLYWCH1 | 0.235 | 0.408 | -0.329 | 0.527 | 0.25 | - | 2 |
| ACTN3 | -0.076 | 0.158 | 0.411 | 0.431 | 0.018 | -0.128 | 2 |
| AGAP2-AS1 | - | 0.533 | - | 0.411 | 0.148 | - | 2 |
| CCND1 | 0.153 | 0.405 | 0.51 | 0.086 | 0.164 | 0.097 | 2 |
| CD9 | 0.228 | 0.433 | 0.051 | 0.283 | 0.436 | 0.243 | 2 |
| CTDSPL | 0.164 | 0.173 | 0.539 | 0.158 | 0.438 | -0.138 | 2 |
| CYB5R3 | 0.127 | 0.54 | 0.102 | 0.136 | 0.097 | 0.516 | 2 |
| LOC283485 | - | 0.404 | - | 0.407 | 0.231 | - | 2 |
| LRRC29 | 0.09 | 0.411 | -0.04 | 0.402 | 0.028 | - | 2 |
| PCDHGA1 | - | 0.205 | - | 0.414 | 0.401 | 0.251 | 2 |
| PHLDA3 | 0.279 | 0.555 | 0.198 | 0.525 | 0.179 | 0.064 | 2 |
| PHLDB1 | 0.063 | 0.151 | 0.484 | 0.403 | 0.205 | -0.061 | 2 |
| PIM3 | 0.167 | 0.439 | -0.112 | 0.425 | 0.206 | - | 2 |
| PTPRZ1 | 0.281 | 0.26 | 0.017 | 0.456 | 0.426 | 0.226 | 2 |
| RP11-134G8.8 | - | 0.49 | - | 0.438 | 0.165 | - | 2 |
| SEMA4B | 0.293 | 0.536 | 0.071 | 0.508 | -0.103 | - | 2 |
| SNX17 | 0.055 | 0.463 | -0.014 | 0.184 | 0.18 | 0.469 | 2 |
| TNFRSF1A | 0.188 | 0.421 | 0.267 | 0.53 | 0.033 | 0.269 | 2 |
| TRIM56 | 0.193 | 0.155 | 0.437 | 0.406 | 0.128 | - | 2 |
| WTIP | 0.069 | 0.423 | 0.44 | 0.155 | -0.021 | - | 2 |
| ZNRF1 | 0.15 | 0.51 | 0.213 | 0.44 | 0.298 | - | 2 |