

Table S3 Ligands-Targets genes matrix in T cells of Cell Data

| Targets genes | Overlapped 7 Ligands |            |            |            |            |            |            |
|---------------|----------------------|------------|------------|------------|------------|------------|------------|
|               | DSC3                 | LAMA2      | APP        | IGF1       | APOE       | CXCL12     | SFRP2      |
| AR            | 0.00145802           | 0          | 0.00426135 | 0.00143412 | 0          | 0          | 0          |
| EHF           | 0                    | 0          | 0          | 0          | 0          | 0          | 0.0014834  |
| GATA3         | 0.00153533           | 0.0039342  | 0          | 0          | 0          | 0          | 0.00175145 |
| SOX17         | 0.00171058           | 0          | 0          | 0          | 0          | 0          | 0.00149118 |
| ACACB         | 0                    | 0.00593034 | 0          | 0          | 0          | 0          | 0          |
| CARD18        | 0                    | 0          | 0.00956467 | 0          | 0          | 0          | 0          |
| FYB1          | 0                    | 0          | 0.01488517 | 0          | 0          | 0          | 0          |
| SBK1          | 0                    | 0          | 0.00957867 | 0          | 0          | 0          | 0          |
| CHRNA10       | 0                    | 0          | 0          | 0.00816465 | 0          | 0          | 0          |
| CLEC5A        | 0                    | 0          | 0.00638129 | 0.0066239  | 0          | 0          | 0          |
| COL17A1       | 0                    | 0          | 0          | 0.00703821 | 0          | 0          | 0          |
| LAMC3         | 0                    | 0          | 0          | 0.00687119 | 0          | 0          | 0          |
| RLN2          | 0                    | 0          | 0          | 0.00808355 | 0          | 0          | 0          |
| SLC7A5        | 0                    | 0.004301   | 0          | 0.00613325 | 0          | 0          | 0          |
| TRBC2         | 0                    | 0          | 0          | 0.02851115 | 0          | 0          | 0          |
| TCN1          | 0                    | 0          | 0.00719823 | 0          | 0          | 0          | 0          |
| APP           | 0                    | 0          | 0.00390611 | 0.00219514 | 0          | 0          | 0          |
| CAT           | 0                    | 0          | 0.00393927 | 0          | 0          | 0          | 0          |
| CCL19         | 0                    | 0          | 0          | 0          | 0.00646086 | 0          | 0          |
| CXCR4         | 0                    | 0          | 0          | 0          | 0.0038683  | 0.00514401 | 0.00175276 |
| HLA.E         | 0                    | 0          | 0.00400583 | 0          | 0          | 0          | 0          |
| IL10RA        | 0                    | 0          | 0.00418046 | 0          | 0          | 0          | 0          |
| KRT8          | 0                    | 0.00449636 | 0          | 0          | 0          | 0          | 0          |
| SLC2A1        | 0                    | 0          | 0          | 0.00276536 | 0          | 0          | 0          |
| VEGFC         | 0                    | 0          | 0          | 0.00246503 | 0          | 0          | 0          |
| ADH7          | 0                    | 0          | 0          | 0          | 0.00632217 | 0          | 0          |
| C1QB          | 0                    | 0          | 0          | 0          | 0.0056501  | 0          | 0          |
| CCL4          | 0                    | 0          | 0.00208857 | 0          | 0.00450175 | 0          | 0          |
| SELPLG        | 0                    | 0          | 0          | 0          | 0.00459194 | 0          | 0          |
| ITK           | 0                    | 0          | 0          | 0          | 0          | 0.00268502 | 0          |
| MT2A          | 0                    | 0          | 0          | 0          | 0          | 0.00431805 | 0          |
| PTPRC         | 0                    | 0          | 0.00466007 | 0          | 0          | 0          | 0          |
| AGER          | 0                    | 0          | 0.00445822 | 0          | 0          | 0          | 0.00158969 |
| GALNT17       | 0                    | 0          | 0          | 0          | 0          | 0          | 0.00225546 |
| GSC           | 0                    | 0          | 0          | 0          | 0          | 0          | 0.00195753 |
| OSR1          | 0                    | 0          | 0          | 0          | 0          | 0          | 0.00174303 |
| PDE10A        | 0                    | 0          | 0          | 0          | 0          | 0          | 0.00197943 |
| GAPDH         | 0                    | 0          | 0          | 0.00142386 | 0          | 0          | 0          |
| LAPTM5        | 0                    | 0          | 0.00437603 | 0          | 0          | 0          | 0          |
| LCP2          | 0                    | 0          | 0.00476086 | 0          | 0          | 0          | 0          |

|       |   |   |            |   |   |   |   |
|-------|---|---|------------|---|---|---|---|
| OLFM1 | 0 | 0 | 0.00494824 | 0 | 0 | 0 | 0 |
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