###SUPPLEMENTARY TABLES

Supplementary Table 1. The list of immune checkpoint genes.

| Gene    |
|---------|
| YTHDF1  |
| VTCN1   |
| TNFSF9  |
| TNFSF4  |
| TNFSF18 |
| TNFRSF9 |
| TNFRSF4 |
| TNFRSF18|
| SIGLEC15|
| PVR     |
| PTPRC   |
| PDCD1LG2|
| PDCD1   |
| CD274   |
| LGALS9  |
| LDHC    |
| LDHB    |
| LDHA    |
| LAMA3   |
| LAG3    |
| JAK2    |
| JAK1    |
| IL23A   |
| IL12B   |
| IL12A   |
| IFNG    |
| ICOSLG  |
| ICOS    |
| HAVCR2  |
| FGL1    |
| CTLA4   |
| CD8A    |
| CD86    |
| CD80    |
| CD40LG  |
| CD40    |
| CD28    |
| B2M     |
Supplementary Table 2. The list of siRNA and overexpression plasmid sequences.

| Gene sequences | Forward 5’-3’ |
|----------------|--------------|
| siRNA sequences |              |
| siRNA1-ADAM15  | CCCGAGTATTAGCTGCTCTGG |
| siRNA2-ADAM15  | GAATGTACGAGTGTCGACTAG |
| siRNA3-ADAM15  | AGTGCCACTCGTACATTCAG |
| overexpression plasmid sequences | |
| pCAG-ADAM15    | GACTACAAAGACCATGACGATTTGATTATAAGATCATGACATCGACTACAAGGATGAC GATGACAAG |
| pEF1-ADAM15    | GACTACAAAGACCATGACGATTTGATTATAAGATCATGACATCGACTACAAGGATGAC GATGACAAG |
| pEnCMV-ADAM15  | GACTACAAAGACCATGACGATTTGATTATAAGATCATGACATCGACTACAAGGATGAC GATGACAAG |