**Table S1. Antibodies used in this study.**

| Antibody to | Species | Manufacturer | Application | Dilution |
| --- | --- | --- | --- | --- |
| Igγ | Rabbit | Dako, Carpinteria, CA | IHC | 1:1000 |
| IF | 1:1000 |
| WB | 1:1000 |
| Igκ | Mouse | Santa Cruz Biotecnology, Santa Cruz, CA | IHC | 1:100 |
| IF | 1:50 |
| WB | 1:200 |
| Igλ | Mouse | Santa Cruz Biotecnology, Santa Cruz, CA | IHC | 1:100 |
| IF | 1:50 |
| WB | 1:100 |
| CD20 | Mouse | Zhongshan Golden Bridge, Beijing | IHC | 1:100 |
| pan CK | Mouse | Zhongshan Golden Bridge, Beijing | IHC | 1:100 |
| CD16 | Mouse | Santa Cruz Biotecnology, Santa Cruz, CA | IHC | 1:100 |
| CD32 | Mouse | Santa Cruz Biotecnology, Santa Cruz, CA | IHC | 1:100 |
| CD64 | Mouse | Santa Cruz Biotecnology, Santa Cruz, CA | IHC | 1:100 |
| FcRn | Mouse | Santa Cruz Biotecnology, Santa Cruz, CA | IHC | 1:100 |
| RAG1 | Rabbit | Santa Cruz Biotecnology, Santa Cruz, CA | WB | 1:100 |
| RAG2 | Goat | Santa Cruz Biotecnology, Santa Cruz, CA | WB | 1:200 |
| AID | Rabbit | Santa Cruz Biotecnology, Santa Cruz, CA | WB | 1:100 |
| MTA1 | Mouse | Santa Cruz Biotecnology, Santa Cruz, CA | WB | 1:1000 |
| IHC | 1:100 |
| MMP2 | Mouse | Santa Cruz Biotecnology, Santa Cruz, CA | WB | 1:200 |
| MMP9 | Mouse | Santa Cruz Biotecnology, Santa Cruz, CA | WB | 1:200 |
| Intergrin, β1 | Mouse | Santa Cruz Biotecnology, Santa Cruz, CA | WB | 1:200 |
| CD44 | Mouse | Santa Cruz Biotecnology, Santa Cruz, CA | WB | 1:200 |
| E-cadherin | Mouse | Santa Cruz Biotecnology, Santa Cruz, CA | WB | 1:200 |
| β-actin | Mouse | Zhongshan Golden Bridge, Beijing | WB | 1:2000 |

Note: IHC: immunohistochemistry； IF: immunofluorescence; WB: Western blot.