

Description of Additional Supplementary Files

Supplementary Data Legends

Supplementary Data 1. The DEGs of the comparison between LZ and DZ

Supplementary Data 2. The gene lists of all MacroSigs with corresponding log₂FC and adjusted P value

Supplementary Data 3. The DEGs of B cells between LZ and DZ

Supplementary Data 4. The cell numbers and AOI size in each region before quality control