| Basic Information | Catalog Number: PY7-65562 | GenBank Accession Number: BC006338 | Purification Method: <br> Protein A purification |
| :---: | :---: | :---: | :---: |
|  | Size: | Geneld (NCBI): | CloneNo.: |
|  | 100tests, $5 \mu \mathrm{l} /$ test | 930 | 4G7 |
|  | Source: | ENSEMBL Gene ID: | Excitation/Emission maxima |
|  | Mouse | ENSG00000177455 | wavelengths: |
|  | Isotype: | UNIPROTID: | 450-500 nm / 778 nm |
|  | lgG2a | P15391 |  |
|  |  | Full Name: |  |
|  |  | CD19 molecule |  |
|  |  | Calculated MW: |  |
|  |  | 556 aa, 61 kDa |  |


| Applications | Tested Applications: |
| :--- | :--- |
|  | FC |
|  | Species Specificity: |
|  | Human |

Background Information
CD19 is a 95 kDa type I transmembrane glycoprotein belonging to the immunoglobulin superfamily (PMID: 2472450). It is expressed by B cells and follicular dendritic cells. CD19 is up-regulated at the step of B-lineage commitment during the differentiation of the hematopoietic stem cell, it remains on during subsequent stages of differentiation until finally down-regulated during terminal differentiation into plasma cells (PMID: 8528044). CD19 is involved in B cell development, activation and differentiation. It is the dominant component for the signaling complex on B cells that includes CD21 (CR2), CD81 (TAPA-1) and CD225 and acts as a critical co-receptor for BCR signal transduction (PMID: 23210908).

Storage:
Store at $2-8^{\circ} \mathrm{C}$. Avoid exposure to light. Stable for one year after shipment.
Storage Buffer:
PBS with $0.09 \%$ sodium azide and $0.5 \%$ BSA.

Selected Validation Data

$1 \times 10^{\wedge} 6$ human peripheral blood lymphocytes were surface stained with 5 ul PE-Cyanine7 CD19
Recombinant Antibody (PY7-65562, Clone: 4G7) or unstained. Cells were co-stained with CoraLite® Plus 488 Anti-Human CD3 (UCHT1) (CL488-65151, Clone: UCHT1). Cells were not fixed.

