

Technical Data Sheet

Catalog Number:

Size:

Target Name: CD4, T4, Leu3a

Regulatory Status: RUO

Product Details

Isotype: Rat IgG2b

Antibody Type: Monoclonal

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA

Protein Concentration: Supplied at a lot-specific concentration.

Storage and Handling: The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.

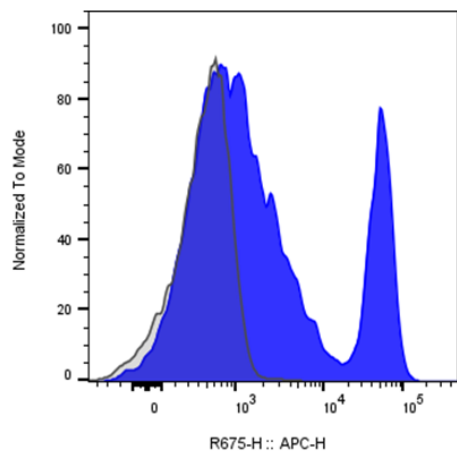
Recommended Usage: For flow cytometric staining, it is recommended to use 5 uL of this reagent per 0.5-1.0 million cells in a 100 µL volume. Optimal reagent performance should be determined by titration for each specific application.

Excitation Laser: Red Laser (633 nm)

Background Information

CD4 is a 55 kDa type I transmembrane glycoprotein and a member of the immunoglobulin superfamily. It acts as a co-receptor that, in cooperation with the T cell receptor (TCR), binds to MHC class II molecules on antigen-presenting cells (APCs), stabilizing the immunological synapse and enhancing TCR signaling through association with the Src-family kinase Lck. CD4 is expressed by most thymocytes, the majority of helper T cells, a subset of NK-T cells, and weakly by dendritic cells and macrophages. During thymic development, CD4 is co-expressed with CD8 on double-positive thymocytes before lineage commitment to CD4+ or CD8+ single-positive T cells. CD4 plays a critical role in T cell development and is essential for optimal function of mature T cells.

Product Data



Mouse splenocytes stained with either iF647 Anti-mouse CD4 clone GK1.5 (blue histogram) or an isotype control (gray histogram).