anti-mouse CD45 no azide

Monoclonal Antibody IBL-5/25 to CD45 (Mouse)

Cat-No: N/76273441

100 µg in 100 µl

**Clone:** IBL-5/25

**Specificity:** This anti-mouse CD45 monoclonal antibody detects CD45 (L-CA) which is a transmembrane phosphotyrosine phosphatase expressed on leukocytes. This monoclonal antibody induces the in vitro clustering of mouse lymphocytes (both T and B cells).

**Isotype subclass:** Rat IgG1

**Form:** Purified

**Physical state:** Liquid

**Buffer/Additives/Preservative:** sterile PBS containing no additives (pH 7.2).

**Expiration date:** The reagent is stable until the expiry date stated on the vial label.

**Storage conditions:** Store at 4 °C. For long term storage, aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.

**Application:** Flow Cytometry, Immunoprecipitation and Immunohistochemistry

**Background:** CD45 (LCA, leukocyte common antigen) is a receptor-type protein tyrosine phosphatase ubiquitously expressed in all nucleated hematopoietic cells, comprising approximately 10% of all surface proteins in lymphocytes. CD45 glycoprotein is crucial in lymphocyte development and antigen signaling, serving as an important regulator of Src-family kinases. CD45 protein exists as multiple isoforms as a result of alternative splicing; these isoforms differ in their extracellular domains, whereas they share identical transmembrane and cytoplasmic domains. These isoforms differ in their ability to translocate into the glycosphingolipid-enriched membrane domains and their expression depends on cell type and physiological state of the cell. Besides the role in immunoreceptor signaling, CD45 is important in promoting cell survival by modulating integrin-mediated signal transduction pathway and is also involved in DNA fragmentation during apoptosis.

**References:**