

anti-mouse CD45 APC-conjugated

APC- conjugated monoclonal antibody IBL-5/25 to mouse CD45

Cat-No: **22150456**

500 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/k

Form: The purified antibody is conjugated with cross-linked Allophycocyanin (APC) under optimum conditions. The reagent is adjusted for direct use. No reconstitution is necessary.

Physical state: Liquid

Buffer/Additives/Preservative: PBS containing 1 % BSA and 0.09 % sodium azide (pH 7.2).

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

Storage conditions: Store at 4 °C. Avoid prolonged exposure to light.

Application: Flow Cytometry

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:

- 1.) Balazas M., Horvath G., Balogh P. Simple determination for donor/host origin and donor leukocyte subsets in rat-mouse chimeras. *Jimmunol Methods*. 1998 **218**:117-21.
- 2.) Balogh P., Kumanovics A., Juhasz I. Studies on the tissue-related phenotypic heterogeneity of murine Bcells. *Dev Immunol*. 1998 **6**: 179-85.

Warning: Sodium azide is harmful if swallowed (R22). Keep out of reach of children (S2). Keep away from food, drink and animal feeding stuff (S13). Wear suitable protective clothing (S36). If swallowed, seek medical advice immediately and show this container or label (S46). Contact with acids liberates very toxic gas (R32). Azide compounds should be flushed with large volumes of water during disposal to avoid deposits in lead or copper plumbing where explosive conditions can develop.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

ImmunoTools Excellent Quality - Advantageously priced

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