EXBIO Antibodies

PRODUCT DATA SHEET

A7-553-C100

Monoclonal Antibody to CD45 (mouse) Alexa Fluor® 700 conjugated (0.1 mg)

Clone: EM-05

Isotype: Rat IgG

Specificity: The antibody EM-05 reacts with mouse CD45 antigen (Leukocyte Common Antigen), a single chain type I transmembrane protein expressed at high level on cells of hematopoietic origin, except erythrocytes and platelets.

Immunogen: Murine peripheral blood leukocytes

Species Reactivity: Mouse

Preparation: The purified antibody is conjugated with Alexa Fluor® 700 under optimum conditions. The conjugate is purified by size-exclusion chromatography.

Concentration: 0.5 mg/ml

Storage Buffer: The reagent is provided in phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent.

Storage / Stability: Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light.
Do not use after expiration date stamped on vial label.
Short-term exposure to room temperature should not affect the quality of the reagent. However, if reagent is stored under any conditions other than those specified, the conditions must be verified by the user.

Usage: The reagent is designed for Flow Cytometry analysis.
Suggested working concentration is 4 µg/ml. Indicated dilution is recommended starting point for use of this product. Working concentrations should be determined by the investigator.

Expiration: See vial label

Lot Number: See vial label

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.

For laboratory research only, not for drug, diagnostic or other use.

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References:

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