EXBIO Antibodies

PRODUCT DATA SHEET

A4-315-T025

Monoclonal Antibody to CD222 Alexa Fluor® 488 conjugated (25 tests)

Clone: MEM-238

Isotype: Mouse IgG1

Specificity: The antibody MEM-238 recognizes an epitope between domains 2 and 5 of CD222 (IGF2 receptor), a ubiquitously expressed 250 kDa multifunctional type I transmembrane protein. The majority of CD222 is found in the late endosomal/prelysosomal compartment, 5-10% in the plasma membrane and the truncated (220 kDa) form of CD222 is present in human and bovine serum.

Immunogen: Recombinant Vaccinia virus encoding CD222.

Species Reactivity: Human, Non-Human Primates

Preparation: The purified antibody is conjugated with Alexa Fluor 488 under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.

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 of human blood cells using 4 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension.
The content of a vial (0.1 ml) is sufficient for 25 tests.

Expiration: See vial label

Lot Number: See vial label

Background: CD222 (CIMPR, cation-independent mannose 6-phosphate receptor; IGF2 receptor) is a ubiquitously expressed 250 kDa transmembrane protein. No more than 10% of CD222 is present on the cell surface where it serves as a multifunctional receptor. Intracellular (major) fraction of CD222 is involved in transport of newly synthesized lysosomal enzymes modified by mannose 6-phosphate from Golgi apparatus to lysosomes. The cell surface CD222 binds and internalizes exogeneous mannose 6-phosphate-containing ligands. Importantly, CD222 is crutial for internalization and degradation of insulin-like growth factor 2, thus controling cell growth. CD222 also complexes CD87 (urokinase-type plasminogen-activator receptor), plasminogen and latent TGF-beta, last but not least CD222 serves as a receptor for heparanase and even for Listeria.

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

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References:

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