

A6-315-T100

Monoclonal Antibody to CD222 Alexa Fluor® 647 conjugated (100 tests)

Clone:	MEM-238
Isotype:	Mouse IgG1
Specificity:	The antibody MEM-238 recognizes an epitope between amino acids 192-697 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. HLDA VII; WS Code 70640
Regulatory Status:	RUO
Immunogen:	Recombinant Vaccinia virus encoding CD222.
Species Reactivity:	Human, Non-Human Primates
Preparation:	The purified antibody is conjugated with Alexa Fluor® 647 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 stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
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.
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 (0.4 ml) is sufficient for 100 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 exogenous mannose 6-phosphate-containing ligands. Importantly, CD222 is crucial for internalization and degradation of insulin-like growth factor 2, thus controlling 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.

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**Antibodies****References:**

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- *Leksa V, Pfisterer K, Ondrovičová G, Binder B, Lakatošová S, Donner C, Schiller HB, Zwirzitz A, Mrvová K, Pevala V, Kutejová E, Stockinger H: Dissecting mannose 6-phosphate-insulin-like growth factor 2 receptor complexes that control activation and uptake of plasminogen in cells. *J Biol Chem*. 2012 Jun 29;287(27):22450-62.
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