

## **Product datasheet for SM2004RP**

## OriGene Technologies, Inc.

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## **IGF2R Mouse Monoclonal Antibody [Clone ID: MEM-238]**

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: MEM-238
Applications: FC, WB

Recommended Dilution: Flow Cytometry analysis of human blood cells using 20 μl reagent / 100 μl of whole blood

or 10e6 cells in a suspension.

The content of a vial (2 ml) is sufficient for 100 tests.

**Reactivity:** Human, Primate

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Recombinant Vaccinia virus encoding CD222

**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.

**Formulation:** Phosphate buffered saline (PBS) solution containing 15mM sodium azide

Label: PE

State: Liquid purified Ig fraction

Label: Conjugated with R-Phycoerythrin under optimum conditions. The conjugate is purified

by size-exclusion chromatography and adjusted for direct use.

Conjugation: PE

Storage: Store the antibody at 2 - 8 °C. DO NOT FREEZE! This product is photosensitive and should be

protected from light.

Stability: Shelf life: one year from despatch.

Gene Name: insulin like growth factor 2 receptor

**Database Link:** Entrez Gene 3482 Human

P11717





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.

Synonyms:

CI-MPR, Insulin-like growth factor 2 receptor, Insulin-like growth factor II receptor, M6P/IGF2 receptor, CI Man-6-P receptor, M6PR, Late Endosome Marker, M6P/IGF2R, MPR 300

**Protein Families:** 

Druggable Genome, Transmembrane

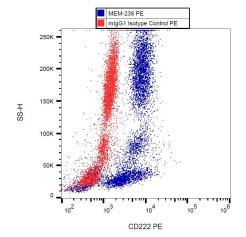
Protein Pathways:

Lysosome

## **Product images:**



Fig. 1. Western Blotting



Western Blotting analysis (non-reducing conditions) of CD222 in whole cell lysate of JURKAT human peripheral blood T cell leukemia cell line. Lane 1: immunostaining with anti-CD222 (MEM-238) Lane 2: immunostaining with Isotype mouse IgG1 control (PPV-06)

Intracellular staining of human peripheral blood with anti-CD222 (MEM-238) PE.