



Biotinylated Anti-human CD-M6PR Antibody

ORDERING INFORMATION

Catalog Number: BAF5320

Lot Number: CCBD01

Size: 50 µg

Formulation: 0.2 µm filtered solution in PBS
with BSA

Storage: -20° C

Reconstitution: sterile 0.1% BSA in TBS

Specificity: human CD-M6PR
luminal domain

Immunogen: NS0-derived rhCD-M6PR
luminal domain

Ig Type: goat IgG

Application: Western blot

Background

The CD-M6PR (cation-dependent mannose 6-phosphate receptor; also CD-MPR) is a 44 - 46 kDa member of the P-type lectin family of proteins. It is ubiquitously expressed, found internally, and transports newly formed mannose 6-phosphate bearing acid hydrolases from the secretory pathway to acidified lysosomes. Mature human CD-M6PR is a type I transmembrane glycoprotein that is 251 amino acids (aa) in length. It functions as a homodimer, and contains a 159 aa luminal region (aa 27 - 185) plus a 67 aa cytoplasmic domain. The aa residues Gln66, Arg111, Glu133 and Tyr143 recognize carbohydrate; Asp103 interacts with divalent cation (Mn²⁺), increasing ligand affinity and receptor oligomerization. Over aa 27 - 184, human CD-M6PR shares 90% aa identity with mouse CD-M6PR.

Preparation

Produced in goats immunized with purified, NS0-derived, recombinant human CD-M6PR luminal domain (rhCD-M6PR; aa 27 - 185; Accession # P20645). Human CD-M6PR specific IgG was purified by human CD-M6PR affinity chromatography and then biotinylated.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) containing 50 µg of bovine serum albumin (BSA) per 1 µg of antibody.

Reconstitution

Reconstitute with sterile Tris-buffered saline pH 7.3 (20 mM Trizma base, 150 mM NaCl) containing 0.1% BSA. If 1 mL of buffer is used, the antibody concentration will be 50 µg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C **in a manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody has been selected for use as a detection antibody in human CD-M6PR Western blots.

Application

Western blot - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect human CD-M6PR. The detection limit for rhCD-M6PR is approximately 20 ng/lane and 5 ng/lane under non-reducing and reducing conditions, respectively. In this format, this antibody shows approximately 40% cross-reactivity with rmCD-M6PR.

Optimal dilutions should be determined by each laboratory for each application.

FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

**R&D Systems, Inc.
1-800-343-7475**

4/1/09