

Anti-human CD-M6PR Antibody

ORDERING INFORMATION

Catalog Number: AF5320

Lot Number: CCAG01

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human CD-M6PR
luminal domain

Immunogen: NS0-derived rhCD-M6PR
luminal domain

Ig Type: goat IgG

Applications: Western blot
Direct ELISA

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.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 0.2 mg/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

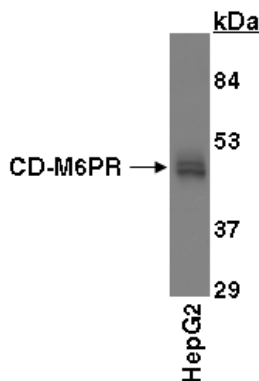
This antibody has been selected for its ability to recognize human CD-M6PR in direct ELISAs and Western blots.

Applications

Western blot - An antibody concentration of 1.0 µg/mL is recommended.

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human CD-M6PR. The detection limit for rhCD-M6PR is approximately 0.5 ng/well. In this format, this antibody shows approximately 60% cross-reactivity with rmCD-M6PR.

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



Detection of CD-M6PR with AF5320.

Cell lysates were resolved by SDS-PAGE, transferred to an Immobilon-P membrane and immunoblotted with 1.0 µg/mL goat anti-hCD-M6PR.