

Anti-IGF2R Antibody

Catalog # ABO11492

Specification

Anti-IGF2R Antibody - Product Information

ApplicationWB, IHC-P, ICCPrimary AccessionP11717HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Cation-independent mannose-6-phosphate receptor(IGF2R)detection. Tested with WB, IHC-P, ICC in Human;Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-IGF2R Antibody - Additional Information

Gene ID 3482

Other Names

Cation-independent mannose-6-phosphate receptor, CI Man-6-P receptor, CI-MPR, M6PR, 300 kDa mannose 6-phosphate receptor, MPR 300, Insulin-like growth factor 2 receptor, Insulin-like growth factor II receptor, IGF-II receptor, M6P/IGF2 receptor, M6P/IGF2R, CD222, IGF2R, MPRI

Calculated MW 274375 MW KDa

Application Details Immunocytochemistry, 0.5-1 μg/ml, Human, Mouse, Rat
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, Rat, Mouse, By Heat
Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat

Subcellular Localization

Lysosome membrane ; Single-pass type I membrane protein . Colocalized with DPP4 in internalized cytoplasmic vesicles adjacent to the cell surface.

Protein Name Cation-independent mannose-6-phosphate receptor

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human Mannose 6 Phosphate Receptor(Cation independent)(2475-2491aa TKLVSFHDDSDEDLLHI), different from the related rat and mouse sequences by one amino acid.



Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the MRL1/IGF2R family.

Anti-IGF2R Antibody - Protein Information

Name IGF2R

Synonyms MPRI

Function

Mediates the transport of phosphorylated lysosomal enzymes from the Golgi complex and the cell surface to lysosomes (PubMed:18817523, PubMed:2963003). Lysosomal enzymes bearing phosphomannosyl residues bind specifically to mannose-6-phosphate receptors in the Golgi apparatus and the resulting receptor-ligand complex is transported to an acidic prelysosomal compartment where the low pH mediates the dissociation of the complex (PubMed:18817523, PubMed:2963003). The receptor is then recycled back to the Golgi for another round of trafficking through its binding to the retromer (PubMed:18817523). The receptor is then recycled back to the Golgi for another round of trafficking through its binding to the retromer (PubMed:18817523). This receptor also binds IGF2 (PubMed:18817523). This receptor also binds IGF2 (PubMed:18046459). Acts as a positive regulator of T-cell coactivation by binding DPP4 (PubMed:10900005).

Cellular Location

Golgi apparatus membrane; Single-pass type I membrane protein. Endosome membrane; Single-pass type I membrane protein. Note=Mainly localized in the Golgi at steady state and not detectable in lysosome (PubMed:18817523) Colocalized with DPP4 in internalized cytoplasmic vesicles adjacent to the cell surface (PubMed:10900005).

Anti-IGF2R Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation



<u>Flow Cytomety</u>
 <u>Cell Culture</u>

Anti-IGF2R Antibody - Images



Anti-Mannose 6 Phosphate Receptor(Cation independent) antibody, ABO11492, IHC(P)IHC(P): Human Intestinal Cancer Tissue



Anti-Mannose 6 Phosphate Receptor(Cation independent) antibody, ABO11492, ICCICC: HCT116 Cell





Anti-Mannose 6 Phosphate Receptor(Cation independent) antibody, Western blottingAll lanes: Anti Mannose 6 Phosphate Receptor (Cation independent) (ABO11492) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: JURKAT Whole Cell Lysate at 40ugLane 3: 22RV1 Whole Cell Lysate at 40ugLane 4: 293T Whole Cell Lysate at 40ugPredicted bind size: 274KDObserved bind size: 274KD

Anti-IGF2R Antibody - Background

Insulin-like growth factor 2 receptor, also called IGF2R or I-MPR is a protein that in humans is encoded by the IGF2R gene. This gene is mapped to 6q25.3. This gene encodes a receptor for both insulin-like growth factor 2 and mannose 6-phosphate, although the binding sites for either are located on different segments of the receptor. This receptor functions in the intracellular trafficking of lysosomal enzymes, the activation of transforming growth factor beta, and the degradation of insulin-like growth factor 2. While the related mouse gene shows exclusive expression from the maternal allele, imprinting of the human gene appears to be polymorphic, with only a minority of individuals showing expression from the maternal allele.