

IGF2R Blocking Peptide (C-Term) Synthetic peptide Catalog # BP21955b

### Specification

## IGF2R Blocking Peptide (C-Term) - Product Information

Primary Accession

<u>P11717</u>

## IGF2R Blocking Peptide (C-Term) - 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

#### Target/Specificity

The synthetic peptide sequence is selected from aa 2444-2458 of HUMAN IGF2R

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# IGF2R Blocking Peptide (C-Term) - 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:<a href="http://www.uniprot.org/citations/2963003" target="\_blank">2963003</a>, PubMed:<a href="http://www.uniprot.org/citations/18817523" target="\_blank">18817523</a>). 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:<a

href="http://www.uniprot.org/citations/2963003" target="\_blank">2963003</a>, PubMed:<a href="http://www.uniprot.org/citations/18817523" target="\_blank">18817523</a>). The receptor is then recycled back to the Golgi for another round of trafficking through its binding to the retromer (PubMed:<a href="http://www.uniprot.org/citations/18817523"



target="\_blank">18817523</a>). This receptor also binds IGF2 (PubMed:<a href="http://www.uniprot.org/citations/18046459" target="\_blank">18046459</a>). Acts as a positive regulator of T-cell coactivation by binding DPP4 (PubMed:<a href="http://www.uniprot.org/citations/10900005" target="\_blank">10900005</a>).

#### **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).

# IGF2R Blocking Peptide (C-Term) - Protocols

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

#### <u>Blocking Peptides</u>

IGF2R Blocking Peptide (C-Term) - Images

# IGF2R Blocking Peptide (C-Term) - Background

Transport of phosphorylated lysosomal enzymes from the Golgi complex and the cell surface to lysosomes. Lysosomal enzymes bearing phosphomannosyl residues bind specifically to mannose-6phosphate receptors in the Golgi apparatus and the resulting receptor-ligand complex is transported to an acidic prelyosomal compartment where the low pH mediates the dissociation of the complex. This receptor also binds IGF2. Acts as a positive regulator of T-cell coactivation, by binding DPP4.

# IGF2R Blocking Peptide (C-Term) - References

Morgan D.O., et al. Nature 329:301-307(1987). Oshima A., et al.J. Biol. Chem. 263:2553-2562(1988). Gemma A., et al. Submitted (NOV-1998) to the EMBL/GenBank/DDBJ databases. Killian J.K., et al. Mamm. Genome 10:74-77(1999). Mungall A.J., et al. Nature 425:805-811(2003).