

Product Data Sheet

IGF2R Protein, Human (HEK293, His-Avi)

Cat. No.: HY-P700870

Synonyms: CI-MPR; M6PR; MPR 300; IGF-II receptor; M6P/IGF2R; CD222; MPRI

Species: Human
Source: HEK293

Accession: P11717 (E47-M1508)

Gene ID: 3482

Molecular Weight: 165-200 kDa

PROPERTIES

Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4. Normally 8% trehalose is added as protectant before lyophilization.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 $\mu g/mL$ in ddH ₂ O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

IGF2R Protein serves as a crucial mediator in cellular processes, orchestrating the transport of phosphorylated lysosomal enzymes from the Golgi complex and the cell surface to lysosomes. Lysosomal enzymes carrying phosphomannosyl residues specifically bind to mannose-6-phosphate receptors in the Golgi apparatus, forming a receptor-ligand complex that is transported to an acidic prelysosomal compartment. The low pH in this compartment facilitates the dissociation of the complex, after which the receptor is recycled back to the Golgi for further trafficking through its interaction with the retromer. Additionally, IGF2R binds IGF2 and acts as a positive regulator of T-cell coactivation by directly interacting with DPP4. The protein further engages with HA-I and HA-II plasma membrane adapters, demonstrating its versatile molecular interactions. Its binding to the heterotrimeric retromer cargo-selective complex highlights its involvement in retrograde trafficking from endosomes to the Golgi apparatus, underscoring its essential role in intracellular transport and cellular homeostasis.

Page 1 of 2 www.MedChemExpress.com

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

Tel: 609-228-6898 Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Page 2 of 2 www.MedChemExpress.com