CD222 Antibody – Mouse Monoclonal

PRODUCT OVERVIEW

Product Name	CD222, Monoclonal Antibody
Full Product Name	CD222 (Insulin-Like Growth Factor II Receptor, IGF2R) (APC)
Product Gene Name	anti-CD222 antibody
Clonality	Monoclonal
Isotype	IgG1
Clone Number	MEM-238
Host	Mouse
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. Labeled with Allophycocyanin (APC).
Purity/Purification	Purified by Protein G Affinity Chromatography
Specificity	Recognizes human and mouse CD222. Recognizes an epitope located in the region between extracellular domains 2 and 5 (aa 192-697; UniProt Accession #P11717) of CD222 (Roberts, et al.). Species Crossreactivity: Rhesus monkey
Preparation and Storage	Store at 4 degree C. Do Not Freeze.
Molecular Weight	274,375 Da
Chromosome Location	Chromosome: 6; NC_000006.11 (160390131..160527583). Location: 6q26
OMIM	147280
3D Structure	ModBase 3D Structure for P11717
Immunogen	Recombinant vaccinia virus containing CD222
Conjugate	APC
Product Categories/Family for anti-CD222 antibody	Antibodies; CD Markers
Applications Tested/Suitable for anti-CD222 antibody	ELISA (EIA)
Related Product Information for anti-CD222 antibody	MBS6268405 is an antibody targeting CD222. Also known as CD222 (Insulin-Like Growth Factor II Receptor, IGF2R) (APC). Reactive in Human. Host: Mouse.
Product References and Citations for anti-CD222 antibody	1. Roberts, R.C. et al. (2010) Mistargeting of SH3TC2 away from the recycling endosome causes Charcot-Marie-Tooth disease type 4C. Hum Mol Genet. 19: 1009-18. 2. Adachi, A. et al. (2010) Golgi-associated GSK3beta regulates the sorting process of post-Golgi membrane trafficking. J Cell Sci. 123: 3215-25.3. Godar, S. et al. (2002) CD222 (Mannose-6 phosphate / insulin-like growth factor II-receptor) Summary and Workshop Report. In Leucocyte Typing VII: White Cell Differentiation Antigens. Edited by Mason, D. et al. Oxford University Press. pp482-485. 4. Rezgui, D. et al. (2009) Structure and function of the human Gly1619Arg polymorphism of M6P/IGF2R domain 11 implicated in IGF2 dependent growth. J Mol Endocrinol. 42: 341-56. 5. McCormick, P.J. et al. (2008) Palmitoylation controls recycling in lysosomal sorting and trafficking. Traffic. 9: 1984-97.
Other Notes	Small volumes of anti-CD222 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CD222. It may not necessarily be applicable to this product.

NCBI GI #	119964726
NCBI GeneID	3482
NCBI Accession #	NP_000867.2
UniProt Primary Accession #	P11717
UniProt Secondary Accession #	Q7Z7G9; Q96PT5
UniProt Related Accession #	P11717
GenBank Nucleotide #	NM_000876.2
NCBI Official Full Name	cation-independent mannose-6-phosphate receptor
NCBI Official Synonym Full Names	insulin-like growth factor 2 receptor
NCBI Official Symbol	IGF2R
NCBI Official Synonym Symbols	MPR1; MPRI; CD222; CIMPR; M6P-R
UniProt Protein Name	Cation-independent mannose-6-phosphate receptor
UniProt Synonym Protein Names	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
Protein Family	Cation-independent mannose-6-phosphate receptor
UniProt Gene Name	IGF2R
UniProt Synonym Gene Names	MPRI; CI Man-6-P receptor; CI-MPR; M6PR; MPR 300; IGF-II receptor; M6P/IGF2R
UniProt Entry Name	MPRI_HUMAN
NCBI Protein Information	cation-independent mannose-6-phosphate receptor; M6PR; CI-MPR; MPR 300; M6P/IGF2R; IGF-II receptor; M6P/IGF2 receptor; CI Man-6-P receptor; 300 kDa mannose 6-phosphate receptor; insulin-like growth factor II receptor; cation-independent mannose-6 phosphat
NCBI Summary for CD222	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. [provided by RefSeq, Apr 2013]

UniProt Comments for CD222	IGF2R: a multifunctional type I transmembrane protein receptor that binds insulin-like growth factor 2 at the cell surface and mannose-6-phosphate-tagged proteins in the trans-Golgi network. Also known as the cation-independent mannose-6 phosphate (M6P) receptor. Clears IGF2 from the cell surface to attenuate signaling, and transports M6P-tagged lysosomal enzymes from the Golgi complex and the cell surface to lysosomes. M6P-tagged lysosomal enzymes bind specifically to mannose-6- phosphate 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. Acts as a positive regulator of T-cell coactivation, by binding DPP4. Belongs to the MRL1/IGF2R family. Protein type: Receptor, misc.; Vesicle; Membrane protein, integral Chromosomal Location of Human Ortholog: 6q26 Cellular Component: extracellular space; cell surface; clathrin coat; focal adhesion; lysosomal membrane; integral to plasma membrane; trans-Golgi network; trans-Golgi network transport vesicle; membrane; nuclear envelope lumen; perinuclear region of cytoplasm; endocytic vesicle; late endosome; endosome Molecular Function: G-protein coupled receptor activity; identical protein binding; mannose binding; protein binding; retinoic acid binding; enzyme binding; transporter activity; G-protein alpha-subunit binding; phosphoprotein binding; receptor activity; glycoprotein binding; insulin-like growth factor II binding; insulin-like growth factor receptor activity Biological Process: G-protein coupled receptor protein signaling pathway; receptor-mediated endocytosis; organ regeneration; response to retinoic acid; insulin-like growth factor receptor signaling pathway; positive regulation of apoptosis; spermatogenesis; signal transduction; liver development; post-embryonic development Disease: Hepatocellular Carcinoma
Research Articles on CD222	**1.** Results showed that insulin-like growth factor 2 ApaI and IFG2R Gly1619Arg gene polymorphisms are not associated with male infertility.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/monoclonal-human-antibody/cd222/6268405