Soluble Adenylate Cyclase 10 Blocking Peptide

PRODUCT OVERVIEW

Product Name	Adenylate Cyclase 10 (Adcy10), Blocking Peptide
Full Product Name	Soluble Adenylate Cyclase 10 Peptide
Product Gene Name	Adcy10 blocking peptide
Product Synonym Names	3', 5'-cyclic AMP synthetase; Adenylate cyclase 10 (soluble); AH related protein; ATP pyrophosphate-lyase; Germ cell soluble adenylyl cyclase; HCA2; hsAC; hypercalciuria absorptive; SAC; SACI; Sacy; Soluble adenylyl cyclase; Testicular soluble adenylyl cyclase antibody
Form/Format	Antigenic Blocking Peptide
Concentration	Quantity: 250 ug; Volume: 100 ul (lot specific)
Preparation and Storage	-20• degree C for long term storage
Antibody/Peptide Pairs	Adenylate Cyclase 10 peptide (MBS544413) is used for blocking the activity of Adenylate Cyclase 10 antibody (MBS544773)
Antibody/Peptide Pairs	Adenylate Cyclase 10 peptide (MBS544413) is used for blocking the activity of Adenylate Cyclase 10 antibody (MBS544774)
Antibody/Peptide Pairs	Adenylate Cyclase 10 peptide (MBS544413) is used for blocking the activity of Adenylate Cyclase 10 antibody (MBS544775)
Molecular Weight	52,952 Da
Immunogen	Synthetic peptide taken within amino acid region 200-250 on mouse Adenylate Cyclase type 10 protein.
Expression	Expressed in testis.
Molecular Function	Adenylate cyclase activity; ATP binding; Magnesium ion binding; Manganese ion binding
Structure	Belongs to the adenylyl cyclase class-4/guanylyl cyclase family. Contains 2 guanylate cyclase domains.
Subcellular Location	Cell membrane, Cytoplasm, Cytoskeleton, Membrane
Applications Tested/Suitable for Adcy10 blocking peptide	Immunodepletion, Immunocompetition
Application Notes for Adcy10 blocking peptide	Western Blot: 1:500
Related Product Information for Adcy10 blocking peptide	Antigenic Blocking Peptide Bicarbonate activated soluble adenylate cyclase 10 Soluble adenylyl cyclase that has a critical role in mammalian spermatogenesis. Produces the cAMP which mediates in part the cAMP-responsive nuclear factors indispensable for maturation of sperm in the epididymis. Induces capacitation, the maturational process that sperm undergo prior to fertilization. May be the bicarbonate sensor.
Other Notes	Small volumes of Adcy10 blocking peptide 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.
Searchable Terms for Adcy10 purchase	MBS544413 is a blocking peptide targeting Adcy10. Also known as Soluble Adenylate Cyclase 10 Peptide.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for Adcy10. It may not necessarily be applicable to this product.

NCBI GI #	227497595
NCBI GeneID	271639
NCBI Accession #	NP_766617.2
UniProt Primary Accession #	Q8C0T9
UniProt Secondary Accession #	Q3V0F8; B2RRJ9
UniProt Related Accession #	Q8C0T9
GenBank Nucleotide #	NM_173029.3
NCBI Official Full Name	adenylate cyclase type 10
NCBI Official Synonym Full Names	adenylate cyclase 10
NCBI Official Symbol	Adcy10
NCBI Official Synonym Symbols	sAC; Sacy; 4931412F17; 4930431D04Rik
UniProt Protein Name	Adenylate cyclase type 10
UniProt Synonym Protein Names	Germ cell soluble adenylyl cyclase; sAC; Testicular soluble adenylyl cyclase
Protein Family	Adenylate cyclase
UniProt Gene Name	Adcy10
UniProt Synonym Gene Names	Sac; Sacy; sAC
UniProt Entry Name	ADCYA_MOUSE
NCBI Protein Information	adenylate cyclase type 10
UniProt Comments for Adcy10	SAC: Soluble adenylyl cyclase that has a critical role in mammalian spermatogenesis. Produces the cAMP which mediates in part the cAMP-responsive nuclear factors indispensable for maturation of sperm in the epididymis. Induces capacitation, the maturational process that sperm undergo prior to fertilization. May be the bicarbonate sensor. Involved in ciliary beat regulation. Genetic variations in ADCY10 are a cause of susceptibility to hypercalciuria absorptive type 2 (HCA2). Absorptive hypercalciuria is a common type of hypercalciuria, a condition characterized by excessive urinary calcium excretion. Absorptive hypercalciuria is due to gastrointestinal hyperabsorption of calcium and is a frequent cause of calcium oxalate nephrolithiasis. Belongs to the adenylyl cyclase class-4/guanylyl cyclase family. 3 isoforms of the human protein are produced by alternative splicing. Protein type: EC 4.6.1.1; Lyase; Nucleotide Metabolism - purine; Adenylyl cyclase Cellular Component: apical part of cell; axon; cell projection; cell soma; cytoplasm; cytoskeleton; cytosol; dendrite; growth cone; membrane; microtubule cytoskeleton; mitochondrion; nucleus; perinuclear region of cytoplasm; plasma membrane Molecular Function: adenylate cyclase activity; ATP binding; ATPase binding; lyase activity; magnesium ion binding; manganese ion binding; metal ion binding; nucleotide binding; phosphorus-oxygen lyase activity Biological Process: cAMP biosynthetic process; cyclic nucleotide biosynthetic process; positive regulation of apoptosis; spermatogenesis
Research Articles on Adcy10	**1.** sAC is a regulator of gene expression involved in aldosterone signaling and an important regulator of endothelial stiffness.
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/blocking-peptide/adenylate-cyclase-10/544413