ATP5D Antibody (C-Term) Blocking Peptide

PRODUCT OVERVIEW

Product Name	ATP5D, Blocking Peptide
Full Product Name	ATP5D Antibody (C-term) Blocking Peptide
Product Gene Name	ATP5D blocking peptide
Product Synonym Names	ATP synthase subunit delta; mitochondrial; F-ATPase delta subunit; ATP5D
Form/Format	Synthetic peptide was lyophilized with 100% acetonitrile and is supplied as a powder. Reconstitute with 0.1 ml DI water for a final concentration of 1 mg/ml.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C.
Antibody/Peptide Pairs	ATP5D peptide (MBS9222046) is used for blocking the activity of ATP5D antibody (MBS9210485)
Molecular Weight	17,490 Da
OMIM	603150
Cellular Location	Mitochondrion. Mitochondrion inner membrane.
Related Product Information for ATP5D blocking peptide	Mitochondrial membrane ATP synthase (F(1)F(0) ATP synthase or Complex V) produces ATP from ADP in the presence of a proton gradient across the membrane which is generated by electron transport complexes of the respiratory chain. F-type ATPases consist of two structural domains, F(1) - containing the extramembraneous catalytic core, and F(0) - containing the membrane proton channel, linked together by a central stalk and a peripheral stalk. During catalysis, ATP turnover in the catalytic domain of F(1) is coupled via a rotary mechanism of the central stalk subunits to proton translocation. Part of the complex F(1) domain and of the central stalk which is part of the complex rotary element. Rotation of the central stalk against the surrounding alpha(3)beta(3) subunits leads to hydrolysis of ATP in three separate catalytic sites on the beta subunits.
Other Notes	Small volumes of ATP5D 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 ATP5D purchase	MBS9222046 is a blocking peptide targeting ATP5D. Also known as ATP5D Antibody (C-term) Blocking Peptide.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for ATP5D. It may not necessarily be applicable to this product.

NCBI GI #	584812
NCBI GeneID	513
NCBI Accession #	P30049.2
UniProt Primary Accession #	P30049
UniProt Secondary Accession #	Q6FG90; D6W5Y3
UniProt Related Accession #	P30049
NCBI Official Full Name	ATP synthase subunit delta, mitochondrial
NCBI Official Synonym Full Names	ATP synthase, H+ transporting, mitochondrial F1 complex, delta subunit
NCBI Official Symbol	ATP5D
UniProt Protein Name	ATP synthase subunit delta, mitochondrial

UniProt Synonym Protein Names	F-ATPase delta subunit
UniProt Gene Name	ATP5D
UniProt Entry Name	ATPD_HUMAN
NCBI Protein Information	ATP synthase subunit delta, mitochondrial
NCBI Summary for ATP5D	This gene encodes a subunit of mitochondrial ATP synthase. Mitochondrial ATP synthase catalyzes ATP synthesis, utilizing an electrochemical gradient of protons across the inner membrane during oxidative phosphorylation. ATP synthase is composed of two linked multi-subunit complexes: the soluble catalytic core, F1, and the membrane-spanning component, Fo, comprising the proton channel. The catalytic portion of mitochondrial ATP synthase consists of 5 different subunits (alpha, beta, gamma, delta, and epsilon) assembled with a stoichiometry of 3 alpha, 3 beta, and a single representative of the other 3. The proton channel consists of three main subunits (a, b, c). This gene encodes the delta subunit of the catalytic core. Alternatively spliced transcript variants encoding the same isoform have been identified. [provided by RefSeq, Jul 2008]
UniProt Comments for ATP5D	ATP5D: Mitochondrial membrane ATP synthase (F(1)F(0) ATP synthase or Complex V) produces ATP from ADP in the presence of a proton gradient across the membrane which is generated by electron transport complexes of the respiratory chain. F-type ATPases consist of two structural domains, F(1) - containing the extramembraneous catalytic core, and F(0) - containing the membrane proton channel, linked together by a central stalk and a peripheral stalk. During catalysis, ATP turnover in the catalytic domain of F(1) is coupled via a rotary mechanism of the central stalk subunits to proton translocation. Part of the complex F(1) domain and of the central stalk which is part of the complex rotary element. Rotation of the central stalk against the surrounding alpha(3)beta(3) subunits leads to hydrolysis of ATP in three separate catalytic sites on the beta subunits. Belongs to the ATPase epsilon chain family. Protein type: Hydrolase; Energy Metabolism - oxidative phosphorylation; Mitochondrial; EC 3.6.3.14 Chromosomal Location of Human Ortholog: 19p13.3 Cellular Component: mitochondrial inner membrane; mitochondrial matrix; mitochondrial proton-transporting ATP synthase complex Molecular Function: ATPase activity; hydrogen ion transporting ATP synthase activity, rotational mechanism; transmembrane transporter activity Biological Process: ATP biosynthetic process; ATP synthesis coupled proton transport; mitochondrial ATP synthesis coupled proton transport
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