ATG3 siRNA – Ubiquitin-Like-Conjugating Enzyme ATG3 Isoform 2 (Human)

PRODUCT OVERVIEW

Product Name	ATG3, siRNA
Full Product Name	ATG3 siRNA (Human)
Product Gene Name	ATG3 sirna
Product Synonym Names	APG3; APG3L; Ubiquitin-like-conjugating enzyme ATG3; Autophagy-related protein 3; APG3-like; hApg3; Protein PC3-96
Host	Synthetic
Species Reactivity	Human
Form/Format	Lyophilized powder
Purity/Purification	> 97%
Specificity	ATG3 siRNA (Human) is a target-specific 19-23 nt siRNA oligo duplexes designed to knock down gene expression.
Preparation and Storage	Shipped at 4 degree C. Store at -20 degree C for one year.
Molecular Weight	35,467 Da
OMIM	609606
3D Structure	ModBase 3D Structure for Q9NT62
Negative Control	siRNA Negative Control (Catalog# MBS8241404) is a non-targeting 21 nt siRNA recommended as a negative control for experiments using targeted siRNA transfection.
Quality Control	Oligonucleotide synthesis is monitored base by base through trityl analysis to ensure appropriate coupling efficiency. The oligo is subsequently purified by affinity-solid phase extraction. The annealed RNA duplex is further analyzed by mass spectrometry to verify the exact composition of the duplex. Each lot is compared to the previous lot by mass spectrometry to ensure maximum lot-to-lot consistency.
Directions for Use	We recommends transfection with 100 nM siRNA 48 to 72 hours prior to cell lysis. Before resuspending, briefly centrifuge the tube to ensure the lyophilized siRNA is at the bottom of the tube. Resuspend the siRNA oligos to an appropriate concentration with DEPC water. For each vial, suitable for 250 transfections in 24 well plate (20 pmol for each well).
Components	We offer pre-designed sets of 3 different target-specific siRNA oligo duplexes of human ATG3 gene. Each vial contains 5 nmol of lyophilized siRNA. The duplexes can be transfected individually or pooled together to achieve knockdown of the target gene, which is most commonly assessed by qPCR or western blot. Our siRNA oligos are also chemically modified (2'-OMe) at no extra charge for increased stability and enhanced knockdown in vitro and in vivo.
Applications Tested/Suitable for ATG3 sirna	RNA Interference (RNAi)
Related Product Information for ATG3 sirna	MBS8200371 is an siRNA targeting ATG3. Also known as ATG3 siRNA (Human). Reactive in Human. Host: Synthetic. siRNA to inhibit ATG3 expression using RNA interference
Other Notes	Small volumes of ATG3 sirna 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 ATG3. It may not necessarily be applicable to this product.

NCBI GI #	523704487
NCBI GeneID	64422
NCBI Accession #	NP_001265641.1
UniProt Primary Accession #	Q9NT62
UniProt Secondary Accession #	Q6PKC5; Q9H6L9
UniProt Related Accession #	Q9NT62
GenBank Nucleotide #	NM_001278712.1
NCBI Official Full Name	ubiquitin-like-conjugating enzyme ATG3 isoform 2
NCBI Official Synonym Full Names	autophagy related 3
NCBI Official Symbol	ATG3
NCBI Official Synonym Symbols	APG3; APG3L; PC3-96; APG3-LIKE
UniProt Protein Name	Ubiquitin-like-conjugating enzyme ATG3
UniProt Synonym Protein Names	Autophagy-related protein 3; APG3-like; hApg3; Protein PC3-96
Protein Family	Autophagy-related protein
UniProt Gene Name	ATG3
UniProt Synonym Gene Names	APG3; APG3L; APG3-like; hApg3
UniProt Entry Name	ATG3_HUMAN
NCBI Protein Information	ubiquitin-like-conjugating enzyme ATG3
NCBI Summary for ATG3	This gene encodes a ubiquitin-like-conjugating enzyme and is a component of ubiquitination-like systems involved in autophagy, the process of degradation, turnover and recycling of cytoplasmic constituents in eukaryotic cells. This protein is known to play a role in regulation of autophagy during cell death. A pseudogene of this gene is located on chromosome 20. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2013]
UniProt Comments for ATG3	ATG3: an E2-like enzyme essential for Apg8p lipidation. Protein type: EC 6.3.2.-; Autophagy; Enzyme, cellular metabolism; Ubiquitin conjugating system Chromosomal Location of Human Ortholog: 3q13.2 Cellular Component: cytoplasmic ubiquitin ligase complex; cytosol Molecular Function: protein binding; enzyme binding; small conjugating protein ligase activity; APG8 conjugating enzyme activity; APG12 conjugating enzyme activity Biological Process: mitochondrion degradation; protein modification process; protein ubiquitination; mitochondrial fragmentation during apoptosis; protein targeting to membrane; autophagic vacuole formation
Research Articles on ATG3	**1.** ATG3 gene and its gene family may play an important role in transformation of myelodysplastic syndrome.
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/human-sirna/atg3/8200371