SUMF1 cDNA Clone – Sulfatase Modifying Factor 1 (Human)

PRODUCT OVERVIEW

Product Name	SUMF1, cDNA Clone
Full Product Name	SUMF1 cDNA Clone
Product Gene Name	SUMF1 cdna clone
Sequence	ATGGCTGCGC CCGCACTAGG GCTGGTGTGT GGACGTTGCC CTGAGCTGGG TCTCGTCCTC TTGCTGCTGC TGCTCTCGCT GCTGTGTGGA GCGGCAGGGA GCCAGGAGGC CGGGACCGGT GCGGGCGCGG GGTCCCTTGC GGGTTCTTGC GGCTGCGGCA CGCCCCAGCG GCCTGGCGCC CATGGCAGTT CGGCAGCCGC TCACCGATAC TCGCGGGAGG CTAACGCTCC GGGCCCCGTA CCCGGAGAGC GGCAACTCGC GCACTCAAAG ATGGTCCCCA TCCCTGCTGG AGTATTTACA ATGGGCACAG ATGATCCTCA GATAAAGCAG GATGGGGAAG CACCTGCGAG GAGAGTTACT ATTGATGCCT TTTACATGGA TGCCTATGAA GTCAGTAATA CTGAATTTGA GAAGTTTGTG AACTCAACTG GCTATTTGAC AGAGGCTGAG AAGTTTGGCG ACTCCTTTGT CTTTGAAGGC ATGTTGAGTG AGCAAGTGAA GACCAATATT CAACAGGCAG TTGCAGCTGC TCCCTGGTGG TTACCTGTGA AAGGCGCTAA CTGGAGACAC CCAGAAGGGC CTGACTCTAC TATTCTGCAC AGGCCGGATC ATCCAGTTCT CCATGTGTCC TGGAATGATG CGGTTGCCTA CTGCACTTGG GCAGGGAAGC GGCTGCCCAC GGAAGCTGAG TGGGAATACA GCTGTCGAGG AGGCCTGCAT AATAGACTTT TCCCCTGGGG CAACAAACTG CAGCCCAAAG GCCAGCATTA TGCCAACATT TGGCAGGGCG AGTTTCCGGT GACCAACACT GGTGAGGATG GCTTCCAAGG AACTGCGCCT GTTGATGCCT TCCCTCCCAA TGGTTATGGC TTATACAACA TAGTGGGGAA CGCATGGGAA TGGACTTCAG ACTGGTGGAC TGTTCATCAT TCTGTTGAAG AAACGCTTAA CCCAAAAGGT CCCCCTTCTG GGAAAGACCG AGTGAAGAAA GGTGGATCCT ACATGTGCCA TAGGTCTTAT TGTTACAGGT ATCGCTGTGC TGCTCGGAGC CAGAACACAC CTGATAGCTC TGCTTCGAAT CTGGGATTCC GCTGTGCAGC CGACCGCCTG CCCACCATGG ACTGA
Molecular Weight	38,386 Da
OMIM	272200
Vector	Please Inquire
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for SUMF1 cdna clone	MBS1278430 is a cDNA clone targeting SUMF1.
Other Notes	Small volumes of SUMF1 cdna clone 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 SUMF1. It may not necessarily be applicable to this product.

NCBI GI #	115528466
NCBI GeneID	285362
NCBI Accession #	BC121122
UniProt Secondary Accession #	Q0VAC6; Q0VAC7; Q2NL78; Q53ZE4; Q6UY39; Q96AK5; Q96DK8; B4DXK5; B7XD05; E9PGL0; G5E9B0
UniProt Related Accession #	Q8NBK3
NCBI Official Full Name	Homo sapiens sulfatase modifying factor 1, mRNA
NCBI Official Synonym Full Names	sulfatase modifying factor 1
NCBI Official Symbol	SUMF1

NCBI Official Synonym Symbols	FGE; UNQ3037; AAPA3037
UniProt Protein Name	Sulfatase-modifying factor 1
UniProt Synonym Protein Names	C-alpha-formylglycine-generating enzyme 1
Protein Family	Sulfatase-modifying factor
UniProt Gene Name	SUMF1
UniProt Synonym Gene Names	FGE
UniProt Entry Name	SUMF1_HUMAN
NCBI Protein Information	sulfatase-modifying factor 1
NCBI Summary for SUMF1	This gene encodes an enzyme that catalyzes the hydrolysis of sulfate esters by oxidizing a cysteine residue in the substrate sulfatase to an active site 3-oxoalanine residue, which is also known as C-alpha-formylglycine. Mutations in this gene cause multiple sulfatase deficiency, a lysosomal storage disorder. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2009]
UniProt Comments for SUMF1	SUMF1: Using molecular oxygen and an unidentified reducing agent, oxidizes a cysteine residue in the substrate sulfatase to an active site 3-oxoalanine residue, which is also called C(alpha)-formylglycine. Known substrates include GALNS, ARSA, STS and ARSE. Defects in SUMF1 are the cause of multiple sulfatase deficiency (MSD). MSD is a clinically and biochemically heterogeneous disorder caused by the simultaneous impairment of all sulfatases, due to defective post-translational modification and activation. It combines features of individual sulfatase deficiencies such as metachromatic leukodystrophy, mucopolysaccharidosis, chondrodysplasia punctata, hydrocephalus, ichthyosis, neurologic deterioration and developmental delay. Inheritance is autosomal recessive. Belongs to the sulfatase-modifying factor family. 3 isoforms of the human protein are produced by alternative splicing. Protein type: Endoplasmic reticulum; Secreted; Oxidoreductase; Secreted, signal peptide; EC 1.8.99.- Chromosomal Location of Human Ortholog: 3p26.1 Cellular Component: endoplasmic reticulum lumen Molecular Function: oxidoreductase activity Biological Process: glycosphingolipid metabolic process; post-translational protein modification Disease: Multiple Sulfatase Deficiency
Research Articles on SUMF1	**1.** SUMF1 catalyses a monooxygenase type of reaction.
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/cdna-clone/sumf1/1278430