

Product datasheet for **RC228283**

SUMF1 (NM_001164675) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SUMF1 (NM_001164675) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SUMF1
Synonyms:	AAPA3037; FGE; UNQ3037
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC228283 representing NM_001164675 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGGCTGCGCCCGCACTAGGGCTGGTGTGTGGACGTTGCCCTGAGCTGGGTCTCGTCCTCTTGCTGCTGC
TGCTCTCGCTGCTGTGTGGAGCGGCAGGGAGCCAGGAGGCCGGGACCGGTGCGGGCGCGGGTCCCTTGC
GGGTTCTTGCGGCTGCGGCACGCCCCAGCGGCTGGCGCCATGGCAGTTCGGCAGCCGCTACCGATAC
TCGCGGGAGGCTAACGCTCCGGGCCCCGTACCCGAGAGCGGCAACTCGCGCACTCAAAGATGGTCCCCA
TCCCTGCTGGAGTATTTACAATGGGCACAGATGATCCTCAGATAAAGCAGGATGGGAAGCACCTGCGAG
GAGAGTTACTATTGATGCCTTTTACATGGATGCCTATGAAGTCAGTAATACTGAATTTGAGAAGTTGTG
AACTCAACTGGCTATTTGACAGAGGCTGAGAAAGTTTGGCGACTCCTTTGTCTTTGAAGGCATGTTGAGTG
AGCAAGTGAAGACCAATATTCAACAGGCAGTTGCAGCTGCTCCCTGGTGGTTACCTGTGAAAGGCCTAA
CTGGAGACACCCAGAAGGGCCTGACTCTACTATTCTGCACAGGCCGGATCATCCAGTTCTCCATGTGTCC
TGGAATGATGCGGTTGCCTACTGCACTTGGGCAGGGAAGCGGCTGCCACGGAAGCTGAGTGGGAATACA
GCTGTGAGGAGGCGCTGCATAATAGACTTTTCCCTGGGCAACAACTGCAGCCCAAAGGCCAGCATT
TGCCAACATTTGGCAGGCGAGTTTCCGGTGACCAACTGGTGAGGATGGCTTCAAGGAAGTGGCGCT
GTTGATGCCTTCCCTCCCAATGGTTATGGCTTATACAACATAGTGGGAACGCATGGGAATGGACTTCAG
ACTGGTGAGCTGTTTCATCTTCTGTTGAAGAAACGCTTAACCCATCTTATTGTTACAGGTATCGCTGTGC
TGCTCGGAGCCAGAACACACCTGATAGCTCTGCTTCAATCTGGATTCCGCTGTGCAGCCGACCGCCTG
CCCACTATGGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC228283 representing NM_001164675
 Red=Cloning site Green=Tags(s)

MAAPALGLVCGRCPELGLVLLLLLLSLLCGAAGSQEAGTGAGAGSLAGSCGCGTPQRPGAHGSSAAAHRY
 SREANAGPVPGERQLAHSKMVPPIAGVFTMGDDPQIKQDGEAPARRVTIDAFYMDAYEVSNTFEKRV
 NSTGYL TEAEKFGDSFVFEGMLSEQVKTNIQQAVAAAPWWLPVKGANWRHPEGPDSTILHRPDHPVLHVS
 WNDAYAYCTWAGKRLPTEAEWEYSCRGLHNRLF PWGNKLQPKGQHYANIWQGEFPVTNTGEDGFQGTAP
 VDAFPNGYGLYNIVGNAWEWTS DWWTVHHSVEETLNP SYCYRYRCAARSQNTPDSSASNLGFRCAADRL
 PTMD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8054_a05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001164675

ORF Size: 1062 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001164675.1](#), [NP_001158147.1](#)

RefSeq ORF: 1065 bp

Locus ID: 285362

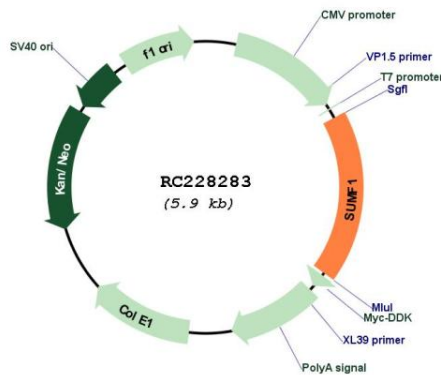
UniProt ID: [Q8NBK3](#)

Cytogenetics: 3p26.1

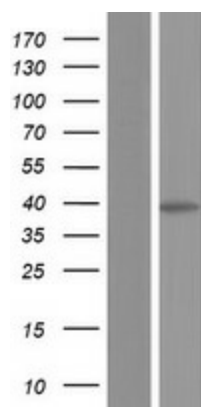
MW: 38.39 kDa

Gene Summary: 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]

Product images:



Circular map for RC228283



Western blot validation of overexpression lysate (Cat# [LY431311]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228283 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).