

Product datasheet for RC228279

SUMF1 (NM_001164674) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SUMF1 (NM_001164674) 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:	>RC228279 representing NM_001164674 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGGCTGCGCCCGCACTAGGGCTGGTGTGTGGACGTTGCCCTGAGCTGGGTCTCGTCTCTTGCTGCTGC
TGCTCTCGCTGCTGTGTGGAGCGGCAGGGAGCCAGGAGGCCGGGACCGGTGCGGGCGGGGTCCCTTGC
GGGTTCTTGGCGCTGCGGCACGCCCCAGCGCCTGGCGCCATGGCAGTTCGGCAGCCGCTCACCGATAC
TCGCGGGAGGCTAACGCTCCGGGCCCGTACCCGGAGAGCGGCAACTCGCGCACTCAAAGATGGTCCCCA
TCCCTGCTGGAGTATTTACAATGGGCACAGATGATCCTCAGATAAAGCAGGATGGGAAGCACCTGCGAG
GAGAGTTACTATTGATGCCTTTACATGGATGCCTATGAAGTCAGTAATACTGAATTTGAGAAGTTGTG
AACTCAACTGGCTATTTGACAGAGGTTGCACTGCTCCCTGGTGGTTACCTGTGAAAGGCCTAACTGGA
GACACCCAGAAGGGCCTGACTCTACTATTCTGCACAGGCCGGATCATCCAGTTCTCCATGTGTCTGGAA
TGATGCGGTTGCCTACTGCACCTGGGCAGGGAAGCGGCTGCCACGGAAGCTGAGTGGGAATACAGCTGT
CGAGGAGGCTGCATAATAGACTTTTCCCTGGGGCAACAACTGCAGCCAAAGGCCAGCATTATGCCA
ACATTTGGCAGGGCGAGTTTCCGGTGACCAACTGGTGGAGTGGCTTCCAAGAACTGCGCCTGTTGA
TGCCTTCCCTCCCAATGGTTATGGCTTATACAACATAGTGGGAAACGCATGGGAATGGACTTCAGACTGG
TGGACTTTCATCATTCTGTTGAAGAAACGCTTAACCCAAAAGTCCCTTCTGGGAAAGACCGAGTGA
AGAAAGGTGGATCCTACATGTGCCATAGGTCTTATTGTTACAGGTATCGCTGTGCTGCTCGGAGCCAGAA
CACACCTGATAGCTCTGCTTCAATCTGGATTCCGCTGTGCAGCCGACCGCCTGCCACTATGGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC228279 representing NM_001164674
Red=Cloning site Green=Tags(s)

MAAPALGLVCGRCPELGLVLLLLLLSLLCGAAGSQEAGTGAGAGSLAGSCGCGTPQRPGAHGSSAAAHRY
 SREANAPGVPGERQLAHSKMVPVIPAGVFTMGTDPPQIKQDGEAPARRVTIDAFYMDAYEVSNTFEKFKV
 NSTGYL TEVAAAAPWWLPVKGANWRHPEGPDSTILHRPDHPVLHVSWNDAVAYCTWAGKRLPTEAEWEYSC
 RGGLHNRLFPWGNKLQPKGQHYANIWQGEFVNTNTGEDGFQGTAPVDAFPNGYGLYINIVGNAWEWTSDW
 WTVHHSVEETLNPKGPPSGKDRVKKGGSYMCHRSYCYRYRCAARSQNTPDSSASNLGFRCAADRLPTMD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001164674

ORF Size: 1047 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.

RefSeq: [NM_001164674.1](#), [NP_001158146.1](#)

RefSeq ORF: 1050 bp

Locus ID: 285362

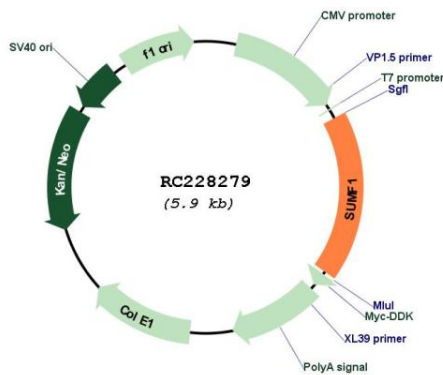
UniProt ID: [Q8NBK3](#)

Cytogenetics: 3p26.1

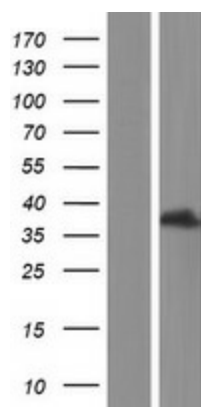
MW: 37.77 kDa

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 RC228279



Western blot validation of overexpression lysate (Cat# [LY431307]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228279 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).