

Product datasheet for **RC220090**

SUMF2 (NM_001042469) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SUMF2 (NM_001042469) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SUMF2
Synonyms:	pFGE
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC220090 representing NM_001042469 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGAGGGCGCATGCGCAGCGGGCCGTGGGTGTACGCGGCGCAGCGCGCAGTCCTGATGGCCCGGCATG
GGTTACCGCTGCTGCCCTGCTGTCGCTCCTGGTCGGCGCTGGCTCAAGCTAGGAAATGGACAGGCTAC
TAGCATGGTCCAAGTGCAGGGTGGGAGATTCTGATGGGAACAAATTCAGACAGCAGAGATGGTGAA
GGGCTGTGCGGGAGGCGACAGTAAACCCTTTGCCATCGACATATTTCTGTCACCAACAAAGATTCA
GGGATTTTGTGAGGAGAAAAAGTATCGGACAGAAGCTGAGATGTTGGATGGAGCTTTGCTTTGAGGA
CTTTGCTCTGATGAGCTGAGAAACAAAGCCACCCAGCCAATGAAGCCTGCAGGTCTGGCTCTGGCATC
CGAGAGAGACTGGAGCACCCAGTGTACACGTGAGCTGGAATGACGCCCGTGCCTACTGTGCTTGGCGGG
GAAAACGACTGCCACGGAGGAAGAGTGGGAGTTTCCCGCCGAGGGGGCTTGAAGGGTCAAGTTTACCC
ATGGGGAACTGGTTCCAGCCAAACCGCACCACTGTGGCAGGGAAAGTTCCCAAGGGAGACAAAGCT
GAGGATGGCTTCCATGGAGTCTCCCAAGTGAATGCTTTCCCGCCGAGCAACACTACGGGCTCTATGACC
TCCTGGGAAACGTGTGGGAGTGGACAGCATCACCGTACCAGGCTGCTGAGCAGGACATGCGCGTCTCCG
GGGGCATCCTGGATCGACACAGCTGATGGCTCTGCCAATCACCGGGCCCGGGTACCACCAGGATGGGC
AACACTCCAGATTCAGCCTCAGACAACCTCGGTTCCGCTGTGCTGCAGACGCAGGCCGGCCGACGGG
AGCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC220090 representing NM_001042469
Red=Cloning site Green=Tags(s)

MRAHAQRGRGCTRRSAAVLMARHGLPLLPLL SLLVGAWLKLGNQATSMVQLQGGRFLMGTNSPDSRDGE
 GPVREATVKPFAIDIFPVTNKDFRDFVREKKYRTEAEMFGWSFVFEDFVSDLRNKATQPMKPAGPGSGI
 RERLEHPVLHVSNDARAYCAWRGKRLPTEEWEF AARGGLKGQVYPWGNWFQPNRTNLWQKFKPKGDKA
 EDGFHGVSPVNAFPAQNNYGLYDLLGNVWEWTASPYQAAEQDMRVLRGASWIDTADGSANHRARVTRMG
 NTPDASDNLGFRCAADAGRPPGEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8050_h09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001042469

ORF Size: 915 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_001042469.1](#), [NP_001035934.2](#)

RefSeq Size: 2019 bp

RefSeq ORF: 861 bp

Locus ID: 25870

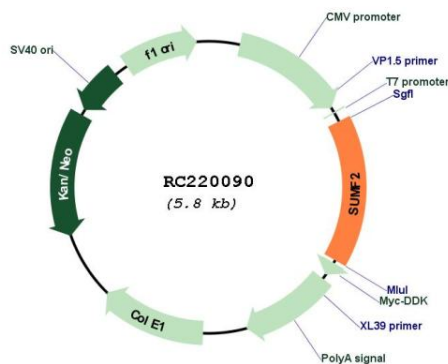
UniProt ID: [Q8NBJ7](#)

Cytogenetics: 7p11.2

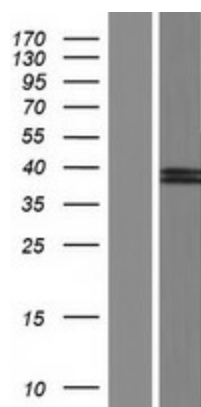
MW: 34.01 kDa

Gene Summary: The catalytic sites of sulfatases are only active if they contain a unique amino acid, C-alpha-formylglycine (FGly). The FGly residue is posttranslationally generated from a cysteine by enzymes with FGly-generating activity. The gene described in this record is a member of the sulfatase-modifying factor family and encodes a protein with a DUF323 domain that localizes to the lumen of the endoplasmic reticulum. This protein has low levels of FGly-generating activity but can heterodimerize with another family member - a protein with high levels of FGly-generating activity. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC220090



Western blot validation of overexpression lysate (Cat# [LY420923]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220090 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).