

Product datasheet for **RC225532**

SUMF2 (NM_001130069) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
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: >RC225532 representing NM_001130069
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGGGCGCATGCGCAGCGGGGCGTGGGTGTACGCGCGCAGCGCGGAGTCTGATGGCCCGGCATG
GGTTACCGCTGCTGCCCTGCTGTCTCTCTGGTCTGGCGCGTGGCTCAAGCTAGGAAATGGACAGGCTAC
TAGCATGGTCCAATGCAGGGTGGGAGATTCCTGATGGGAACAAATTCCTCAGACAGCAGAGATGGTGAA
GGGCTGTGCGGGAGGCGACAGTGAAACCCCTTGCCATCGACATATTCCTGTACCAACAAGATTTC
GGGATTTTGTGAGGAGAAAAAGTATCGGACAGAAGCTGAGATGTTTGGATGGAGCTTTGTCTTTGAGGA
CTTTGTCTCTGATGAGCTGAGAAACAAAGCCACCCAGCCAATGAAGTCTGTACTCTGGTGGCTTCCAGTG
GAAAAGGCATTTTGGAGGCAGCCTGCAGGTCTGGCTCTGGCATCCGAGAGAGACTGGAGCACCCAGTGT
TACACGTGAGCTGGAATGACGCCCCGTGCTACTGTGCTTGGCGGGGAAAACGACTGCCACGGAGGAAGA
GTGGGAGTTTGGCCGCCGAGGGGGCTTGAAGGGTCAAGTTTACCCATGGGGAACTGGTTCCAGCCAAAC
CGCACCAACCTGTGGCAGGGAAGTTCCCAAGGGAGACAAAGCTGAGGATGGCTTCCATGGAGTCTCCC
CAGTGAATGCTTTCCCGCCGAGAACAACTACGGATGGGAACACTCCAGATTCAGCCTCAGACAACCTC
GGTTTCCGCTGTGCTGCAGACGCGCGGCCGCCAGGGGAGCTGTAAGCAGCCGGTGGTGACAAGGAG
AAAAGCCTTCTAGGGTCACTGTCTATCCCTGGCCATGTTGCAAAACAGCGCAATTCCAAGCTCGAGAGCTT
CAGCCTCAGGAAAGAACTTCCCTTCCCTGTCTCCATCCCTCTGTGGCAGGCGCCTCTACCAGGGCAG
GAGAGGACTCAGCCTCTGTGTTTTGGAGAAGGGGCCAATGTGTGTGACGATGGCTGGGGGCCAGGTG
TTTCTGTTAGAGCCAAGTATTAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC225532 representing NM_001130069
Red=Cloning site Green=Tags(s)

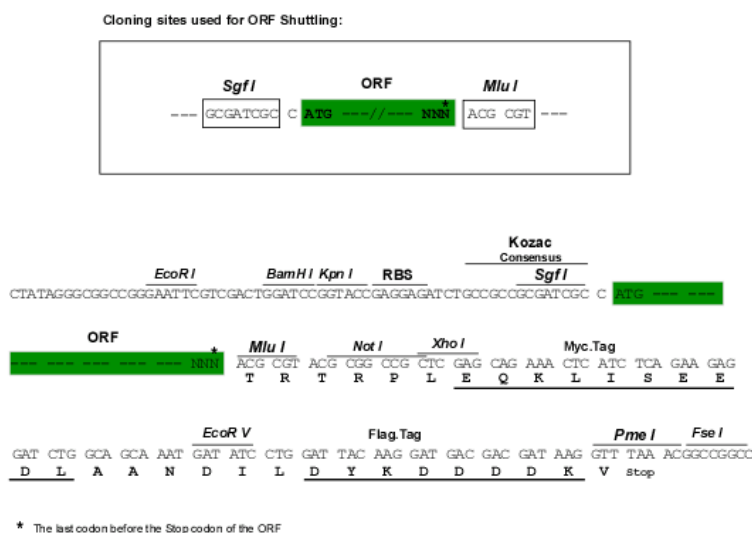
MRAHAQGRGRCRRSAAVLMARHGLPLLPLLSLLVGAWLKLNGQATSMVQLQGGFLMGTNSPDSRDGE
 GPVREATVKPFAIDIFVPTNKDFRDFVREKKYRTEAEMFGWSVFEDFVSDLRNKAQPMKSVLWWLPV
 EKAFWRQPAAGPSGIRERLEHPVLHVSWNDARAYCAWRGKRLPTEEEWEFAARGGLKGVYPWGNWFQPN
 RTNLWQGGFKPGDKAEDGFHGVSPVNAFFAQNNYGWATLQIQPQTTSVSAVLQTQAGRQGSCKQPGGDK
 KSLGLSLFPGPHVANSAPSSRASAGKNFFPVSHPSVAGASHQGRRLSLLCFGEQAQCVLTMAGGQV
 FLLLEAFY

TRTRPLEOKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8054_e07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001130069

ORF Size: 1074 bp

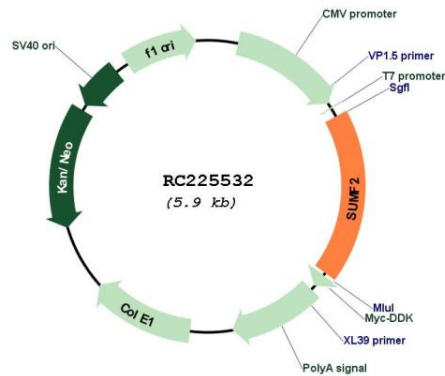
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

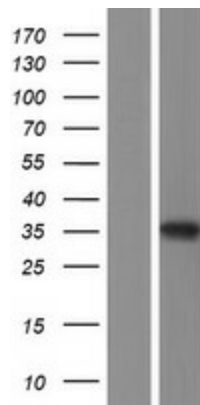
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10µg of transfection-ready, dried plasmid DNA (reconstitute with 100 µl of water).

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:	<u>NM_001130069.2, NP_001123541.1</u>
RefSeq ORF:	1020 bp
Locus ID:	25870
UniProt ID:	<u>Q8NBJ7</u>
Cytogenetics:	7p11.2
MW:	39.49 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 RC225532



Western blot validation of overexpression lysate (Cat# [LY427143]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225532 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).