

Product datasheet for **RG214784**

SUMF2 (NM_001042468) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	SUMF2
Synonyms:	pFGE
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG214784 representing NM_001042468
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGGGCGCATGCGCAGCGGGGCGTGGGTGTACGCGCGCAGCGCGGCAGTCCTGATGGCCCGGCATG
GGTTACCGCTGCTGCCCCGTGCTGCTCCTGGTCGGCGCGTGGCTCAAGCTAGGAAATGGACAGGCTAC
TAGCATGGTCCAATGCAGGGTGGGAGATTCCTGATGGGAACAAATTCCTGTCACCAACAAGATTCA
GGGCTGTGCGGGAGGCGACAGTGAAACCCCTTGCCATCGACATATTCCTGTACCAACAAGATTCA
GGTACATCAGGGATTTTGTGAGGGAGAAAAAGTATCGGACAGAAGCTGAGATGTTTGGATGGAGCTTTGT
CTTTGAGGACTTTGTCTCTGATGAGCTGAGAAACAAAGCCACCCAGCCAATGAAGTCTGTACTCTGGTGG
CTTCCAGTGGAAAAGGCATTTTGGAGGCAGCCTGCAGGTCTGGCTCTGGCATCCGAGAGAGACTGGAGC
ACCCAGTGTTACAGTGAGCTGGAATGACGCCCGTGCCTACTGTGCTTGGCGGGGAAAACGACTGCCAC
GGAGGAAGAGTGGGAGTTTGCCGCCGAGGGGGCTTGAAGGGTCAAGTTTACCATGGGGGAACTGGTTC
CAGCCAAACCGCACCAACCTGTGGCAGGGAAGTTCCCAAGGGAGACAAAGCTGAGGATGGCTTCCATG
GAGTCTCCCCAGTGAATGCTTTCCCGCCGAGAACAACTACGGGCTCTATGACCTCTGGGAACGTGTG
GGAGTGGACAGCATCACCGTACCAGGCTGCTGAGCAGGACATGCGCGTCTCCGGGGGCATCCTGGATC
GACACAGCTGATGGCTCTGCCAATACCGGGCCCGGGTCACCACCAAGGATGGGCAACACTCCAGATTGAG
CCTCAGACAACCTCGGTTTCCGCTGTGCTGCAGACGACGCGCGGCCGCGCCAGGGGAGCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence:

>RG214784 representing NM_001042468

Red=Cloning site Green=Tags(s)

MRAHAQQRGRGCTRRSAAVLMARHGLPLLPLL SLLVGAWLKLGNQATSMVQLQGGRFLMGTNSPDSRDGE
GPVREATVKPFAIDIFPVTNKDFRYIRDFVREKKYRTEAEMFGWSFVFEDFVSEDLRNKATQPMKSVLWW
LPVEKAFWRQPAGPGSGIRERLEHPVLHVSWNDARAYCAWRGKRLPTEEWEFAARGGLKGQVYPWGNWF
QPNRTNLWQKFKPKGDKAEDGFHGVSPVNAFPAQNNYGLYDLLGNVWEWTASPYQAAEQDMRVLRGASWI
DTADGSANHRARVTRMGNTPDSDNLGFRCAADAGRPPGEL

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



CTATAGGCGCGCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGCCGCGCAGATCT

EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI

CAAGCTTAAGCTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC ---

HindIII NheI RsrII MluI NotI XhoI GFP Tag

T R T R P L E M E S D - - -

--- GAA GAA AGA GTT TAA ACGGCCGCCGCGGAGCT

- - E E R V Stop

ACCN:

NM_001042468

ORF Size:

969 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:

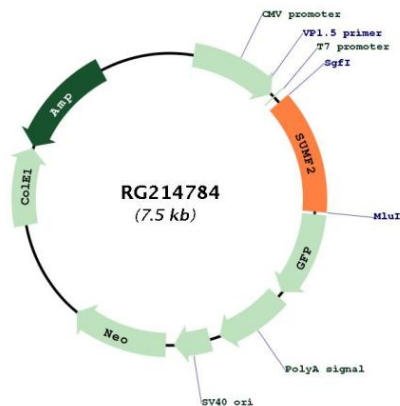
This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<u>NM_001042468.1, NP_001035933.2</u>
RefSeq Size:	2073 bp
RefSeq ORF:	915 bp
Locus ID:	25870
Cytogenetics:	7p11.2
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 RG214784