

## Product datasheet for **RG228279**

### SUMF1 (NM\_001164674) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** SUMF1 (NM\_001164674) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** SUMF1  
**Synonyms:** AAPA3037; FGE; UNQ3037  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG228279 representing NM\_001164674  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCTGCGCCCGCACTAGGGCTGGTGTGTGGACGTTGCCCTGAGCTGGGTCTCGTCTCTTGTCTGCTGC  
 TGCTCTCGCTGCTGTGTGGAGCGGCAGGGAGCCAGGAGGCCGGGACCGGTGCGGGCGGGGTCCCTTGC  
 GGGTTCTTGGCGCTGCGGCACGCCCCAGCGCCTGGCGCCATGGCAGTTCGGCAGCCGCTCACCGATAC  
 TCGCGGGAGGCTAACGCTCCGGGCCCGTACCCGGAGAGCGGCAACTCGCGCACTCAAAGATGGTCCCCA  
 TCCTGCTGGAGTATTTACAATGGGCACAGATGATCCTCAGATAAAGCAGGATGGGAAGCACCTGCGAG  
 GAGAGTTACTATTGATGCCTTTACATGGATGCCTATGAAGTCAGTAATACTGAATTTGAGAAGTTGTG  
 AACTCAACTGGCTATTTGACAGAGGTTGCACTGCTCCCTGGTGGTTACCTGTGAAAGGCCCTAACTGGA  
 GACACCCAGAAGGGCCTGACTCTACTATTCTGCACAGGCCGGATCATCCAGTTCTCCATGTGTCCTGGAA  
 TGATGCGGTTGCCTACTGCACCTGGGCAGGGAAGCGGCTGCCACGGAAGCTGAGTGGGAATACAGCTGT  
 CGAGGAGGCTGCATAATAGACTTTTCCCTGGGGCAACAACTGCAGCCAAAGGCCAGCATTATGCCA  
 ACATTTGGCAGGGCGAGTTTCCGGTGACCAACTGGTGGAGTGGCTTCCAAGGAATGCGCCTGTTGA  
 TGACTTTCCTCCCAATGGTTATGGCTTATAACAATAGTGGGGAACGCATGGGAATGGACTTCAGACTGG  
 TGGACTTTCATCATTCTGTTGAAGAAACGCTTAACCCAAAAGGTCCCTTCTGGGAAAGACCGAGTGA  
 AGAAAGGTGGATCCTACATGTGCCATAGTCTTATTGTTACAGGTATCGCTGTGCTGCTCGGAGCCAGAA  
 CACACCTGATAGCTCTGCTTCAATCTGGGATTCGCTGTGCAGCCGACCGCCTGCCACTATGGAC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA



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**Protein Sequence:** >RG228279 representing NM\_001164674  
 Red=Cloning site Green=Tags(s)

MAAPALGLVCGRCPELGLVLLLLLLSLLCGAAGSQEAGTGAGAGSLAGSCGCGTPQRPGAHGSSAAAHRY  
 SREANAPGPVPGERQLAHSKMVPVIPAGVFTMGTDPPQIKQDGEAPARRVTIDAFYMDAYEVSNTFEKFKV  
 NSTGYL TEVAAAAPWVLPVKGANWRHPEGPDSTILHRPDHPVLHVSWNDAVAYCTWAGKRLPTEAEWEYSC  
 RGGLHNRLFPWGNKLQPKGQHYANIWQGEFVPTNTGEDGFQGTAPVDAFPNGYGLYINIVGNAWEWTS  
 DWVHHSVEETLNPKGPPSGKDRVKKGGSYMCCHRSYCYRYRCAARSQNTPDSSASNLGFRCAADRLPTMD

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**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 Size:** 2104 bp

**RefSeq ORF:** 1050 bp

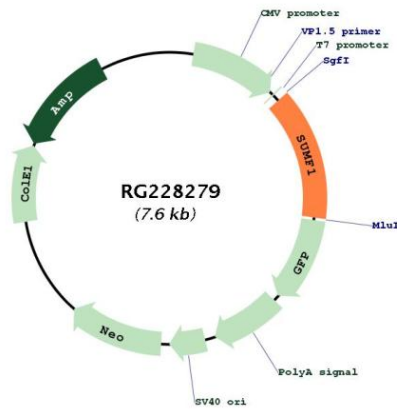
**Locus ID:** 285362

**UniProt ID:** [Q8NBK3](#)

**Cytogenetics:** 3p26.1

**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 RG228279