

## Product datasheet for **RG212675**

### Sulfatase 2 (SULF2) (NM\_018837) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Sulfatase 2 (SULF2) (NM_018837) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Sulfatase 2
Synonyms:	HSULF-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG212675 representing NM\_018837  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGGCCCCCGAGCCTCGTGCTGTGCTTGTGTCCGCAACTGTGTTCTCCCTGCTGGTGGAAGCTCGG  
 CCTTCCTGTCGCACCACCGCCTGAAAGGCAGGTTTCAGAGGGACCGCAGGAACATCCGCCCAACATCAT  
 CCTGGTGTGACGGACGACCAGGATGTGGAGCTGGGTTCCATGCAGGTGATGAACAAGACCCGGCGCATC  
 ATGGAGCAGGGCGGGGCGCACTTCATCAACGCCTTCGTGACCACACCCATGTGCTGCCCTCACGCTCCT  
 CCATCCTCACTGGCAAGTACGTCCACAACCACAACACCTACACCAACAATGAGAAGTGTCTCGCCCTC  
 CTGGCAGGCACAGCAGAGACCGCACCTTTGCCGTGTACCTCAATAGCACTGGTACCGGACAGCTTTC  
 TTCGGGAAGTATCTTAATGAATAACAACGGCTCCTACGTGCCACCCGGCTGGAAGGAGTGGTTCGGACTCC  
 TAAAAAATCCCCTTTTATAACTACACGCTGTGTCGGAACGGGTGAAAGAGAAGCAGCGCTCCGACTA  
 CTCCAAGGATTACCTCACAGACCTCATACCAATGACAGCGTGAGCTTCTCCGCAGTCCAAGAAGATG  
 TACCCGCACAGGCCAGTCCATGGTATCAGCCATGCAGCCCCACGGCCCTGAGGATTCAGCCCCAC  
 AATATTACGCCTCTTCCCAAACGCATCTCAGCACATCACGCCGAGCTACAACACGCGCCAACCCGGA  
 CAAACTGGATCATGCGCTACACGGGGCCATGAAGCCCATCCACATGGAATTCACCAACATGCTCCAG  
 CGGAAGCGCTTGCAGACCCTCATGTGCTGGAGACTCCATGGAGACGATTTACAACATGCTGGTTGAGA  
 CGGGCGAGCTGGACAACAGTACATCGTATACACCGCCGACCACGGTTACCACATCGGCCAGTTTGGCT  
 GGTGAAAGGAAATCCATGCCATATGAGTTTGACATCAGGGTCCCCTTACGTGAGGGGCCCAACGTG  
 GAAGCCGGCTGTCTGAATCCCCACATCGTCTCAACATTGACCTGGCCCCACCATCCTGGACATGGCA  
 GCCTGGACATACCTGCGGATATGGACGGGAAATCCATCCTCAAGCTGCTGGACAGCGGCGCGGTGAA  
 TCGGTTTCACTTGAAAAAGAAGATGAGGGTCTGGCGGGACTCCTTCTGGTGGAGAGGCAAGCTGCTA  
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 GCCTGGCCGACGCCGAAAAAATCTTCAAGAAGAAGTACAAGGCCAGCTATGTCGCGAGTCCATCCAT  
 CCGCTCAGTGGCCATCGAGGTGGACGGCAGGGTGTACCACGTAGGCTGGGTGATGCCGCCAGCCCCGA  
 AACCTCACCAAGCGGCACTGGCCAGGGGCCCTGAGGACCAAGATGACAAGGATGGTGGGACTTCAGTG  
 GCACTGGAGGCCCTCCCGACTACTCAGCCGCCAACCCATTAAAGTGACACATCGGTGCTACATCTAGA  
 GAACGACACAGTCCAGTGTGACCTGGACCTGTACAAGTCCCTGCAGGCCTGGAAAGACCACAAGTGCAC  
 ATCGACCACGAGATTGAAACCCTGCAGAACAAAATTAAGAACCTGAGGGAAGTCCGAGGTACCTGAAGA  
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 CAGAGGCTCCAGTCTGCATCCTTTCAGGAAGGGCTGCAAGAGAAGGACAAGGTGTGGCTGTTGCGGGAG  
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 TTCTGTGAATTTGCAACTGGCTTCTAGAGTACTTTGATCTCAACACAGACCCCTACCAGCTGATGAATG  
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 GGGTTACAAGCAGTGTAAACCCCGGACTCGAAACATGGACCTGGGACTTAAAGATGGAGGAAGCTATGAG  
 CAATACAGGCAGTTTCAGCGTCGAAAGTGGCCAGAAATGAAGAGACCTTCTTCCAATCACTGGGACAAC  
 TGTGGGAAGCTGGGAAGT

**ACGGTACGCGGCCGCTCGAG** - GFP Tag - **GTTTAA**

**Protein Sequence:** >RG212675 representing NM\_018837  
 Red=Cloning site Green=Tags(s)

MGPPSLVLCLLSATVFSLLGGSSAFLSHHRLKGRFQRDRRNIRPNIILVL TDDQDVELGSMQVMNKTRRI  
 MEQGAHF INAFVTTMCCPSRSSILTGKYVHNHNTYTNNENCSSPSWQAQHE SRTFAVYLNSTGYRTAF  
 FGKYLNEYNGSYVPPGWKEWVGLLKNSRFYNYTLCRNGVKEKHGSDYSDYLDITDLSVSFFRTSKKM  
 YPHRPVLMVISHAAPHGPEDESAPQYSRLFPNASQHITPSYNYAPNPKHWIMRYTGPMKPIHMEFTNMLQ  
 RKRLQTLMSVDDSMETIYNMLVETGELDNTYIVYTADHGYHIGQFGLVKGKSMPEYFDIRVFPFYVRGPNV  
 EAGCLNPHIVLNIIDLAPTILDIAGLDIPADM DGKSILKLLDTERPVNRFHLKKKMRVWRDSFLVERGKLL  
 HKRDNDKVDAQEENFLPKYQRVKDL CQRAEYQTACEQLGQKWQCVEDATGKLLKHKCKGPMRLGGSRAL S  
 NLVPKYQGSEACTCDSGDYKLSLAGRRKFLK KKYKASYVRSRSIRSVAIEVDGRVYHVGLGDA A QPR  
 NLTKRHWPAGEDQDDKDGDFSGTGGLPDY SAANPIKVTHRCYILENDTVQCDL DL YKSLQAWKDHKLH  
 IDHEIETLQNKIKNLREVRGHLKKKRPEE CDCHKISYHTQHKGR LKHGSSLHPFRKGLQE KDKVWLLRE  
 QKRRKKLRKLLKRLQNNDTCSMPGLTCF THDNQHWQTAPFWTLGPFCACT SANNNTYWCMRTINE THNFL  
 FCEFATGFLEYFDLNTDPYQLMNAVNTL DRDVLNQLHVQLMELRSCKGYKQCNPRTRNMDLGLKDGGSYE  
 QYRQFQRRKWPEMKRPSSKSLGQLWEGWEG

TRTRPLE - GFP Tag - V

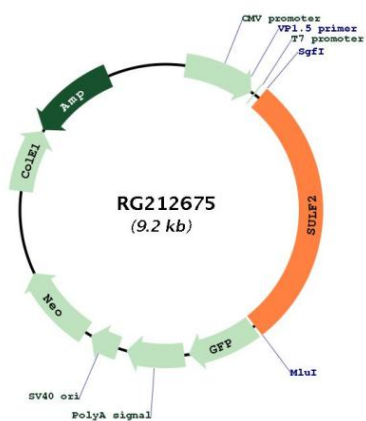
**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



<b>ACCN:</b>	NM_018837
<b>ORF Size:</b>	2610 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_018837.3</a>
<b>RefSeq Size:</b>	3897 bp
<b>RefSeq ORF:</b>	2613 bp
<b>Locus ID:</b>	55959
<b>UniProt ID:</b>	<a href="#">Q8IWU5</a>
<b>Cytogenetics:</b>	20q13.12
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Gene Summary:</b>	Heparan sulfate proteoglycans (HSPGs) act as coreceptors for numerous heparin-binding growth factors and cytokines and are involved in cell signaling. Heparan sulfate 6-O-endosulfatases, such as SULF2, selectively remove 6-O-sulfate groups from heparan sulfate. This activity modulates the effects of heparan sulfate by altering binding sites for signaling molecules (Dai et al., 2005 [PubMed 16192265]).[supplied by OMIM, Mar 2008]

Product images:



Circular map for RG212675