

Product datasheet for **RG221582**

Sulfatase 2 (SULF2) (NM_198596) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sulfatase 2 (SULF2) (NM_198596) 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:

>RG221582 representing NM_198596
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGCCCCCGAGCCTCGTGCTGTGCTTGTGTCGCGCAACTGTGTTCTCCCTGCTGGTGGAAGCTCGG
 CCTTCCTGTCGCACCACCGCCTGAAAGGCAGGTTTCAGAGGGACCGCAGGAACATCCGCCCAACATCAT
 CCTGGTGTGACGGACGACCAGGATGTGGAGCTGGGTTCCATGCAGGTGATGAACAAGACCCGGCGCATC
 ATGGAGCAGGGCGGGGCGCACTTCATCAACGCCTTCGTGACCACACCCATGTGCTGCCCTCACGCTCCT
 CCATCCTCACTGGCAAGTACGTCCACAACCACAACACCTACACCAACAATGAGAAGTGTCTCGCCCTC
 CTGGCAGGCACAGCAGAGACCGCACCTTTGCCGTGTACCTCAATAGCACTGGTACCGGACAGCTTTC
 TTCGGGAAGTATCTTAATGAATAACAACGGCTCCTACGTGCCACCCGGCTGGAAGGAGTGGTTCGGACTCC
 TAAAAAATCCCCTTTTATAACTACACGCTGTGTCGGAACGGGTGAAAGAGAAGCAGCGCTCCGACTA
 CTCCAAGGATTACCTCACAGACCTCATACCAATGACAGCGTGAGCTTCTCCGCAGTCCAAGAAGATG
 TACCCGCACAGGCCAGTCCATGGTATCAGCCATGCAGCCCCACGGCCCTGAGGATTCAGCCCCAC
 AATATTACGCCTCTTCCCAAACGCATCTCAGCACATCACGCCGAGCTACAACACGCGCCAACCCGGA
 CAAACTGGATCATGCGCTACACGGGGCCATGAAGCCCATCCACATGGAATTCACCAACATGCTCCAG
 CGGAAGCGCTTGCAGACCCTCATGTGCGTGGACGACTCCATGGAGACGATTTACAACATGCTGGTTGAGA
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 GGTGAAAGGGAATCCATGCCATATGAGTTTGACATCAGGGTCCCCTTACGTGAGGGGCCCAACGTG
 GAAGCCGGCTGTCTGAATCCCCACATCGTCTCAACATTGACCTGGCCCCACCATCCTGGACATGGCA
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 TCGGTTTCACTTGAAAAAGAAGATGAGGGTCTGGCGGGACTCCTTCTTGGTGGAGAGGCAAGCTGCTA
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 ACCTGTGTGAGCGTGTGAGTACCAGACGGCGTGTGAGCAGCTGGGACAGAAGTGGCAGTGTGTGGAGGA
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 AACCTCGTGCCAAGTACTACGGGCAGGGCAGCGAGGCCGTCACCTGTGACAGCGGGGACTACAAGCTCA
 GCCTGGCCGACGCCGAAAAAATCTTCAAGAAGAAGTACAAGGCCAGCTATGTCGCGAGTCCATCCAT
 CCGCTCAGTGGCCATCGAGGTGGACGGCAGGGTGTACCACGTAGGCTGGGTGATGCCGCCAGCCCCGA
 AACCTCACCAAGCGGCACTGGCCAGGGGCCCTGAGGACCAAGATGACAAGGATGGTGGGACTTCAGTG
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 CAGAGGCTCCAGTCTGCATCCTTTCAGGAAGGGCCTGCAAGAGAAGGACAAGGTGTGGCTGTTGCGGGAG
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 GCCTCACGTGCTTCAACCAGACAACAGCACTGGCAGACGGCGCCTTTCTGGACTGGGGCCTTTCTG
 TGCTGCACCAGCGCCAACAATAACACGTACTGGTGCATGAGGACCATCAATGAGACTCACAATTTCTC
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 CAGTGAACACACTGGACAGGGATGTCCTCAACCAGCTACACGTACAGCTCATGGAGCTGAGGAGCTGCAA
 GGGTTACAAGCAGTGAACCCCGGACTCGAAACATGGACCTGGGACTTAAAGATGGAGGAAGCTATGAG
 CAATACAGGGGACAACCTGTGGGAAGCTGGGAAGGT

ACGCGTACGCGGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG221582 representing NM_198596
Red=Cloning site Green=Tags(s)

MGPPSLVLCLLSATVFSLLGGSSAFLSHHRLKGRFQRDRRNIRPNIILVLTDDQDVELGSMQVMNKTRRI
MEQGGAHFINAFVTTMCCPSRSSILTGKYVHNHNTYTNNECSPSPWQAQHESTRFAVYLNSTGYRTAF
FGKYLNEYNGSYVPPGWKEWVGLLKNSRFYNYTLCRNGVKEKHGSDYSKDYLTDLITNDSVSFFRTSKKM
YPHRPVLMVISHAAPHGPEDSAPQYSRLFNPASQHITPSYNYAPNPKHWIMRYTGPMKPIHMEFTNMLQ
RKRLQTLMSVDDSMETIYNMLVETGELDNTYIVYTADHGYHIGQFGLVKGKSMPEYFDIRVFPFYVRGPNV
EAGCLNPHIVLNIDLAPTILDIAGLDIPADM DGKSILKLLDTERPVNRFHLKKKMRVWRDSFLVERGKLL
HKRDNDKVDAQEENFLPKYQRVKDLCQRAEYQTACEQLGQKWQCVEDATGKLLKHKCKGPMRLGGSRAL
NLVPKYYQGSEACTCDSGDYKLSLAGRRKCLKKKYKASYVRSRSIRSV AIEVDGRVYHVGLGDA AQP
NLTKRHWP G APEDQDDKGGDFSGTGGLPDYSAANPIKVTHRCYILENDTVQCDL DLKSLQAWKDHKLH
IDHEIETLQNKIKNLREVRGHLKKKRPEECDCHKISYHTQHKGR LKHGSSLHPFRKGLQE KDKVWLLRE
QKRKKLRKLLKRLQNDTCSMPGLTCFTHDNQHWQTAPFWTLGPFCACTSANNNTYWC MRTINE THNFL
FCEFATGFLEYFDLNTDPYQLMNAVNTLDRDVLNQLHVQLMELRSCKGYKQCNPRTRNMDLGLKGGSYE
QYRQLWEGWEG

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



ACCN: NM_198596

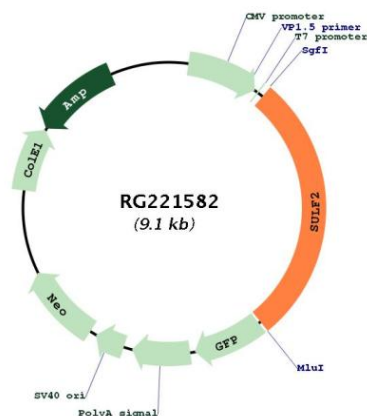
ORF Size: 2556 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:	<ol style="list-style-type: none"> 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:	<u>NM_198596.1, NP_940998.1</u>
RefSeq Size:	3843 bp
RefSeq ORF:	2604 bp
Locus ID:	55959
UniProt ID:	<u>Q8IWU5</u>
Cytogenetics:	20q13.12
Protein Families:	Druggable Genome, Transmembrane
Gene Summary:	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 RG221582