

Product datasheet for **RC212675**

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:	Myc-DDK
Symbol:	Sulfatase 2
Synonyms:	HSULF-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC212675 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGGCCCCCGAGCCTCGTGCTGTGCTTGTGTCGCGCAACTGTGTTCTCCCTGCTGGTGGAAGCTCGG
 CCTTCCTGTCGCACCACCGCCTGAAAGGCAGGTTTCAGAGGGACCGCAGGAACATCCGCCCAACATCAT
 CCTGGTGTGACGGACGACCAGGATGTGGAGCTGGGTTCCATGCAGGTGATGAACAAGACCCGGCGCATC
 ATGGAGCAGGGCGGGGCGCACTTCATCAACGCCTTCGTGACCACACCCATGTGCTGCCCTCACGCTCCT
 CCATCCTCACTGGCAAGTACGTCCACAACCACAACACCTACACCAACAATGAGAAGTGTCTCGCCCTC
 CTGGCAGGCACAGCAGAGACCGCACCTTTGCCGTGTACCTCAATAGCACTGGTACCGGACAGCTTTC
 TTCGGGAAGTATCTTAATGAATACAACGGCTCCTACGTGCCACCCGGCTGGAAGGAGTGGTTCGGACTCC
 TTA AAAACTCCCCTTTTATAACTACACGCTGTGTCGGAACGGGTGAAAGAGAAGCAGGCTCCGACTA
 CTCCAAGGATTACCTCACAGACCTCATACCAATGACAGCGTGAGCTTCTCCGCAGTCCAAGAAGATG
 TACCCGCACAGGCCAGTCCATGGTATCAGCCATGCAGCCCCACGGCCCTGAGGATTACAGCCCCAC
 AATATTACGCCTCTTCCCAAACGCATCTCAGCACATCACGCCGAGCTACAACACTACGCGCCAACCCGGA
 CAAACTGGATCATGCGCTACACGGGCCCCATGAAGCCCATCCACATGGAATTCACCAACATGCTCCAG
 CGGAAGCGCTTGCAGACCCTCATGTGCTGGGACTCCATGGAGACGATTTACAACATGCTGGTTGAGA
 CGGGCGAGCTGGACAACCGTACATCGTATACACCGCCGACCACGGTTACCACATCGGCCAGTTTGGCT
 GGTGAAAGGAAATCCATGCCATATGAGTTTGACATCAGGGTCCCGTTCTACGTGAGGGGCCCAACGTG
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 ACCTGTGTGAGCGTGTGAGTACCAGACGGCGTGTGAGCAGCTGGGACAGAAGTGGCAGTGTGTGGAGGA
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 GCCTGGCCGACGCCGAAAAAACTCTTCAAGAAGAAGTACAAGGCCAGCTATGTCGCGAGTCCATCCAT
 CCGCTCAGTGGCCATCGAGGTGGACGGCAGGGTGTACCACGTAGGCTGGGTGATGCCGCCAGCCCCGA
 AACCTACCAAGCGGCACTGGCCAGGGGCCCTGAGGACCAAGATGACAAGGATGGTGGGACTTCAGTG
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 GAACGACACAGTCCAGTGTGACCTGGACCTGTACAAGTCCCTGCAGGCCTGGAAAGACCACAAGTGCAC
 ATCGACCACGAGATTGAAACCCTGCAGAACAAAATTAAGAACCTGAGGGAAGTCCGAGGTACCTGAAGA
 AAAAGCGGCCAGAAGAATGTGACTGTACAAAAATCAGCTACCACACCCAGCACAAAGGCCGCTCAAGCA
 CAGAGGCTCCAGTCTGCATCCTTTCAGGAAGGGCTGCAAGAGAAGGACAAGGTGTGGCTGTTGCGGGAG
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 TTCTGTGAATTTGCAACTGGCTTCTAGAGTACTTTGATCTCAACACAGACCCCTACCAGCTGATGAATG
 CAGTGAACACACTGGACAGGGATGCTCCTCAACCAGCTACACGTACAGCTCATGGAGCTGAGGAGTGCAA
 GGGTTACAAGCAGTGTAAACCCCGGACTCGAAACATGGACCTGGGACTTAAAGATGGAGGAAGCTATGAG
 CAATACAGGCAGTTTCAGCGTCGAAAGTGGCCAGAAATGAAGAGACCTTCTTCCAATCACTGGGACAAC
 TGTGGGAAGCTGGGAAGT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC212675 protein sequence
 Red=Cloning site Green=Tags(s)

MGPPSLVLCLLSATVFSLLGGSSAFLSHHRLKGRFQRDRRNIRPNIILVLTDDQDVELGSMQVMNKTRRI
 MEQGGAHFINAFVTPMCCPSRSSILTGKYVHNHNTYTNNENCSPPSWQAQHESTRFAVYLNSTGYRTAF
 FGKYLNEYNGSYVPPGWKEWVGLLKNSRFYNYTLCRNGVKEKHGSDYSKDYLTDLITNDSVSFFRTSKKM
 YPHRPVLMVISHAAPHGPEDESAPQYSRLFPNASQHITPSYNYAPNPKHWIMRYTGPMKPIHMEFTNMLQ
 RKRLQTLMSVDDSMETIYNMLVETGELDNTYIVYTADHGVIHQFGLVKGKSMPEYFDIRVFPFYVRGPNV
 EAGCLNPHIVLNIIDLAPTILDIAGLDIPADMGGKSIKLLDTERPVNRFHLKKKMRVWRDSFLVERGKLL
 HKRDNDKVAQEENFLPKYQRVKDLQRAEYQTACEQLGQKWQCVEDATGKLLKHKCKGPMRLGGSRAL
 NLVPKYYQGSEACTCDSGDYKLSLAGRRKLFKPKYKASYVRSRSIRSVAIEVDGRVYHVGLGDAQPR
 NLTKRHWPAPEDQDDKGGDFSGTGGLPDYSAANPIKVTHRCYILENDTVQCDLQDLKSLQAWKDKLH
 IDHEIETLQNKIKNLREVRGHLKKRPEECDCHKISYHTQHKGRLLKRGSSLHPFRKGLQEKDVKWLLRE
 QKRRKKLRLKRLQNNDTCSMPGLTCFTHDNQHWQTAFFWTLGPFCACTSANNNTYWCMTINEHNF
 FCEFATGFLEYFDLNTDPYQLMNAVNTLDRDVLNQLHVQLMELRSCKGKQCNPRTNMDLGLKDGGSYE
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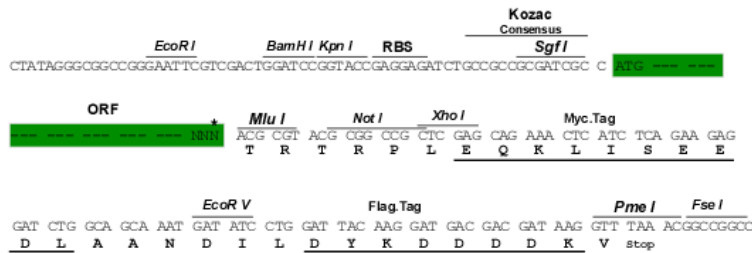
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6446_g03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

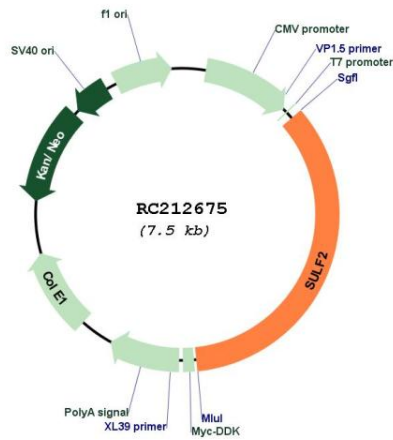
Cloning sites used for ORF Shuttling:



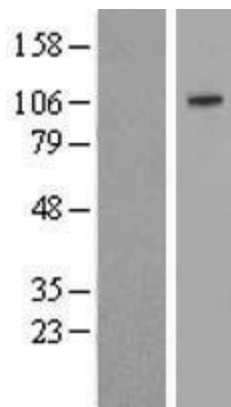
* The last codon before the Stop codon of the ORF

ACCN:	NM_018837
ORF Size:	2610 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:	<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:	NM_018837.3
RefSeq Size:	3909 bp
RefSeq ORF:	2613 bp
Locus ID:	55959
UniProt ID:	Q8IWU5
Cytogenetics:	20q13.12
Protein Families:	Druggable Genome, Transmembrane
MW:	100.5 kDa
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 RC212675



Western blot validation of overexpression lysate (Cat# [LY432060]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC229033] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).