

Product datasheet for **RC216632**

Sulfatase 1 (SULF1) (NM_015170) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sulfatase 1 (SULF1) (NM_015170) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sulfatase 1
Synonyms:	SULF-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC216632 representing NM_015170
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGAAGTATTCTTGCTGTGCTCTGGTTTTGGCTGTCTGGGCACAGAATTGCTGGGAAGCCTCTGTTCGA
 CTGTCTAGATCCCCGAGGTTCTAGAGGACGGATACAGCAGGAACGAAAAACATCCGACCAACATTATTCT
 TGTGCTTACCGATGATCAAGATGTGGAGCTGGGGTCCCTGCAAGTCATGAACAAAACGAGAAAGATTATG
 GAACATGGGGGGCCACCTTCATCAATGCCTTTGTGACTACACCATGTGCTGCCCGTCACGGTCTCCCA
 TGCTCACCGGGAAGTATGTGCACAATCACAATGTCTACACCAACAACGAGAACTGCTCTTCCCCCTCGTG
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216632 representing NM_015170
Red=Cloning site Green=Tags(s)

MKYSCCALVLAVLGTGLLGLSLCSTVRSRFRGRIGQERKNIRPNIIILVLTDDQDVELGSLQVMNKRKIM
 EHGGATFINAFVTPMCCPSRSSMLTGKYVHNHNVYTNNECSPSWQAMHEPRTFAVYLNNTGYRTAFF
 GKYLNEYNGSYIPPGREWGLIKNSRFYNYTVCRNGIKEKHGFDYAKDYFDLITNESINYFKMSKRM
 PHRPVMMVISHAAPHGPEDSAPQFSKLYPNASQHITPSYNYAPNMDKHWIMQYTGPMPLIHMEFTNILQR
 KRLQTLMSVDDSVLRYNMLVETGELENTYIIYTAHGHYHIGQGLVKGKSMYPYDFDIRVPFFIRGPSVE
 PGSIVPQIVLNLIDLAPTILDIAGLDTPPDVDGKSVLKLLDPEKPGNRFRNTKKAKIWRDFTLVERGKFLR
 KKEESSKNIQQSNHLPKYERVKELCQQARYQTACEQPGQKWQCIEDTSGKLRIHKCKGPSDLLTVRQSTR
 NLYARGFHDKDKECSCRESGYRASRSQRKSQRQFLRNQGTPKYKPRFVHTRQTRSLSVEFEGEIIYDINLE
 EEEELQVLQPRNIAKRHDEGHKGPRDLQASSGGNRGRMLADSSNAVGPPTTVRVTHKCFILPNDSIHCR
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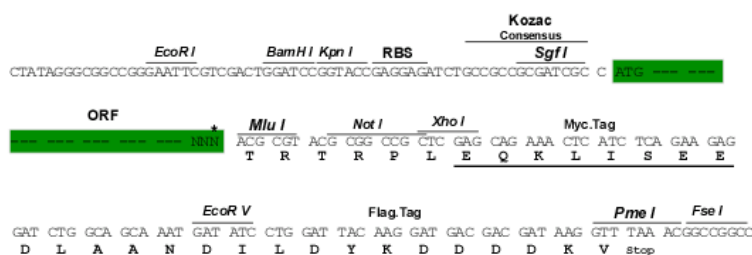
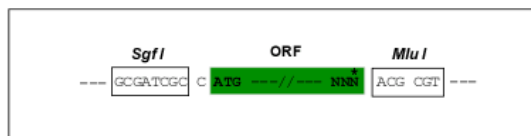
TRTRPLEOKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6170_c09.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

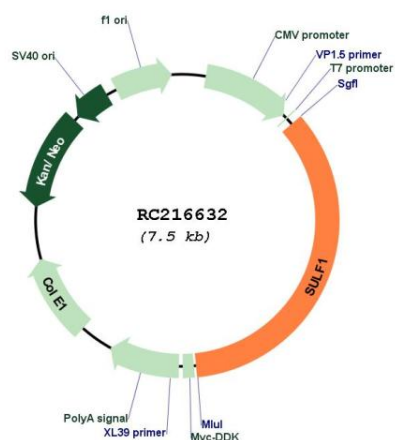
Cloning sites used for ORF Shuttling:



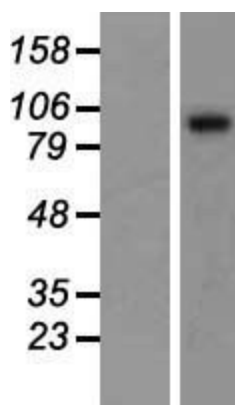
* The last codon before the Stop codon of the ORF

ACCN:	NM_015170
ORF Size:	2613 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:	NM_015170.2
RefSeq Size:	5699 bp
RefSeq ORF:	2616 bp
Locus ID:	23213
UniProt ID:	Q8IWU6
Cytogenetics:	8q13.2-q13.3
Protein Families:	Druggable Genome
MW:	100.8 kDa
Gene Summary:	This gene encodes an extracellular heparan sulfate endosulfatase. The encoded enzyme selectively removes 6-O-sulfate groups from heparan sulfate chains of heparan sulfate proteoglycans (HSPGs). The enzyme is secreted through the Golgi and is subsequently localized to the cell surface. The expression of this gene may be down-regulated in several types of cancer, including hepatocellular (HCC), ovarian and breast cancers. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2013]

Product images:



Circular map for RC216632



Western blot validation of overexpression lysate (Cat# [LY414761]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216632 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).