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Product datasheet for RC210431

Steroid sulfatase (STS) (NM_000351) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Steroid sulfatase (STS) (NM_000351) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Steroid sulfatase
Synonyms:	ARSC; ARSC1; ASC; ES; SSDD; XLI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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ORF Nucleotide Sequence:

>RC210431 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCTTTAAGGAAGATGAAGATCCCTTTCCTCCTACTGTTCTTTCTGTGGGAAGCCGAGAGCCACGCAG
CATCAAGGCCGAACATCATCCTGGTGATGGCTGACGACCTCGGCATTGGAGATCCTGGGTGCTATGGGAA
CAAAACTATCAGGACTCCCAATATCGACCGGTTGGCCAGTGGGGGAGTGAAACTCACTCAGCACCTGGCA
GCATCACCGCTGTGCACACCAAGCAGGGCAGCCTTCATGACTGGCCGGTACCCTGTCCGATCAGGAATGG
CATCTTGGTCCCGCACTGGAGTTTTCCTCTTCACAGCCTCTTCGGGAGGACTTCCCACCGATGAGATTAC
CTTTGCTAAGCTTCTGAAGGATCAAGGTTATTCAACAGCACTGATAGGGAAATGGCACCTTGGGATGAGC
TGTCACAGCAAGACTGACTTCTGTCACCACCCTTTACATCACGGCTTCAATTATTTCTATGGGATCTCTT
TGACCAATCTGAGAGACTGCAAGCCCGGAGAGGGCAGTGTCTTCACCACGGGCTTCAAGAGGCTGGTCTT
CCTCCCCCTGCAGATCGTCGGGGTCACCCTCCTTACCCTTGCTGCACTCAATTGTCTGGGGCTACTCCAC
GTGCCTCTAGGCGTTTTTTTCAGCCTTCTCTTCCTAGCAGCCCTAATCCTGACCCTTTTCTTGGGCTTCC
TTCATTACTTCCGGCCCCTGAACTGCTTCATGATGAGGAACTACGAGATCATTCAGCAGCCCATGTCCTA
TGACAATCTCACCCAGAGGCTAACGGTGGAGGCGGCCCAGTTCATACAGCGGAACACTGAGACTCCGTTC
CTGCTTGTCTTGTCCTACCTCCACGTGCACACAGCCCTGTTCTCCAGCAAAGACTTTGCTGGCAAAAGTC
AACACGGAGTCTACGGGGATGCTGTTGAGGAAATGGACTGGAGTGTGGGGCAGATCTTGAACCTTCTGGA
TGAGCTGAGATTGGCTAATGATACCCTCATCTACTTCACATCGGACCAGGGAGCACATGTAGAAGAAGTG
TCTTCCAAAGGAGAAATTCATGGCGGAAGTAATGGGATCTATAAAGGAGGAAAAGCAAACAACTGGGAAG
GAGGTATCCGGGTTCCAGGCATCCTTCGTTGGCCCAGGGTGATACAGGCTGGCCAGAAGATTGATGAGCC
CACTAGCAACATGGACATATTTCCTACAGTAGCCAAGCTGGCTGGAGCTCCCTTGCCTGAGGACAGGATC
ATTGATGGACGTGATCTGATGCCCCTGCTTGAAGGAAAAAGCCAACGCTCCGATCATGAGTTTCTCTTCC
ATTACTGCAACGCCTACTTAAATGCTGTGCGCTGGCACCCTCAGAACAGCACATCCATCTGGAAGGCCTT
TTTCTTCACCCCCAACTTCAACCCCGTGGGTTCCAACGGATGCTTTGCCACACACGTGTGCTTCTGTTTC
GGGAGTTATGTCACCCATCACGACCCACCTTTACTCTTTGATATTTCCAAAGATCCCAGAGAGAGAAACC
CACTAACTCCAGCATCCGAGCCCCGGTTTTATGAAATCCTCAAAGTCATGCAGGAAGCTGCGGACAGACA
CACCCAGACCCTGCCAGAGGTGCCCGATCAGTTTTCATGGAACAACTTTCTTTGGAAGCCCTGGCTTCAG
CTGTGCTGTCCTTCCACCGGCCTGTCTTGCCAGTGTGATAGAGAAAAACAGGATAAGAGACTGAGCCGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC210431 protein sequence
Red=Cloning site Green=Tags(s)

MPLRKMKIPFLLLFFLWEAESHAASRPNIILVMADDLGIGDPGCYGNKTIRTPNIDRLASGGVKLTQHLA
ASPLCTPSRAAFMTGRYPVRSGMASWSRTGVFLFTASSGGLPTDEITFAKLLKDQGYSTALIGKWHLGMS
CHSKTDFCHHPLHHGFNYFYGISLTNLRDCKPGEGSVFTTGFKRLVFLPLQIVGVTLLTLAALNCLGLLH
VPLGVFFSLLFLAALILTLFLGFLHYFRPLNCFMMRNYEIIQQPMSYDNLTQRLTVEAAQFIQRNTETPF
LLVLSYLHVHTALFSSKDFAGKSQHGVYGDAVEEMDWSVGQILNLLDELRLANDTLIYFTSDQGAHVEEV
SSKGEIHGGSNGIYKGGKANNWEGGIRVPGILRWPRVIQAGQKIDEPTSNMDIFPTVAKLAGAPLPEDRI
IDGRDLMPLLEGKSQRSDHEFLFHYCNAYLNAVRWHPQNSTSIWKAFFFTPNFNPVGSNGCFATHVCFCF
GSYVTHHDPPLLFDISKDPRERNPLTPASEPRFYEILKVMQEAADRHTQTLPEVPDQFSWNNFLWKPWLQ
LCCPSTGLSCQCDREKQDKRLSR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6232_e07.zip

Restriction Sites: SgfI-MluI

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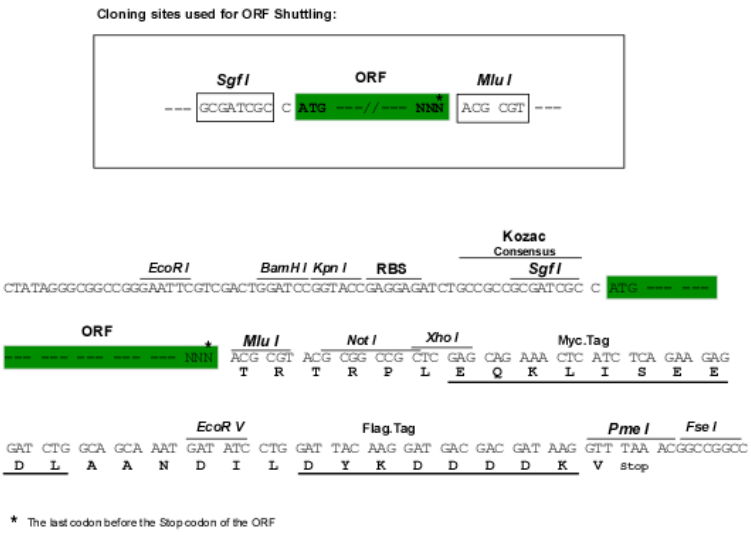
Cloning Scheme:



ACCN: NM_000351

ORF Size: 1749 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_000351.6

RefSeq Size: 6377 bp

RefSeq ORF: 1737 bp

Locus ID: 412

UniProt ID: P08842

Cytogenetics: Xp22.31

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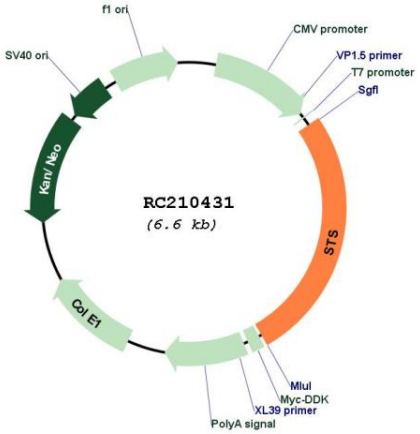
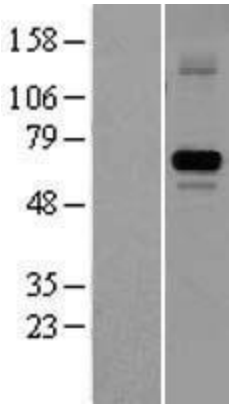
Domains:	Sulfatase
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Androgen and estrogen metabolism
MW:	65.5 kDa
Gene Summary:	This gene encodes a multi-pass membrane protein that is localized to the endoplasmic reticulum. It belongs to the sulfatase family and hydrolyzes several 3-beta-hydroxysteroid sulfates, which serve as metabolic precursors for estrogens, androgens, and cholesterol. Mutations in this gene are associated with X-linked ichthyosis (XLI). Alternatively spliced transcript variants resulting from the use of different promoters have been described for this gene (PMID:17601726). [provided by RefSeq, Mar 2016]

Product images:



Circular map for RC210431



Western blot validation of overexpression lysate (Cat# [LY424769]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210431 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

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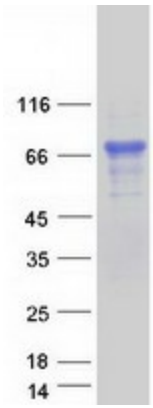

Coomassie blue staining of purified STS protein (Cat# [TP310431]). The protein was produced from HEK293T cells transfected with STS cDNA clone (Cat# RC210431) using MegaTran 2.0 (Cat# [TT210002]).

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