

## Product datasheet for RC203803

### STAR (NM\_000349) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	STAR (NM_000349) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	STAR
Synonyms:	STARD1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC203803 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTGCTAGCGACATTCAAGCTGTGCGCTGGGAGCTCCTACAGACACATGCGCAACATGAAGGGGCTGA  
GGCAACAGGCTGTGATGGCCATCAGCCAGGAGCTGAACCGGAGGGCCCTGGGGGGCCCCACCCCTAGCAC  
GTGGATTAACCAGGTTCCGGCGCGGAGCTCTACTCGGTTCTCGGCTGGAAGAGACTCTCTACAGTGAC  
CAGGAGCTGGCCTATCTCAGCAGGGGGAGGAGCCATGCAGAAGGCCTTGGGCATCCTTAGCAACCAAG  
AGGGCTGGAAGAAGGAGAGTCAGCAGGACAATGGGGACAAAGTGATGAGTAAAGTGGTCCCAGATGTGGG  
CAAGGTGTCCGGCTGGAGGTCGTGGTGGACCAGCCATGGAGAGGCTCTATGAAGAGCTCGTGGAGCGC  
ATGGAAGCAATGGGGGAGTGAACCCCAATGTCAAGGAGATCAAGGTCTGCAGAAGATCGGAAAAGATA  
CATTCACTACTCACGAGCTGGCTGCCGAGGCAGCAGGAAACCTGGTGGGGCCCCGTGACTTTGTGAGCGT  
GCGCTGTGCCAAGCGCCGAGGCTCCACCTGTGTGCTGGCTGGCATGGCCACAGACTTCGGGAACATGCCT  
GAGCAGAAGGGTGTATCAGGGCGGAGCACGGTCCCCTTGCATGGTGTTCACCCGTTGGCTGGAAGTC  
CCTTAAGACAACTTACGTGGCTACTCAGCATCGACCTCAAGGGGTGGCTGCCAAGAGCATCATCAA  
CCAGGTCTGTCCAGACCCAGGTGGATTTGCCAACCACTGCGCAAGCGCTGGAGTCCCACCCCTGCC  
TCTGAAGCCAGGTGT

**ACGCGT**ACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC203803 protein sequence  
Red=Cloning site Green=Tags(s)

MLLATFKLCAGSSYRHRNMKGLRQQAVMAISQELNRRALGGPTPSTWINQVRRRSSLLGSRL EETLYSD  
 QELAYLQQGEEAMQKALGILSNQEGWKKE SQQDNGDKVMSKVVPDVGKVFRL E VVVDQPMERLYEELVER  
 MEAMGEWNPVNKEIKVLQKIGKDTFITHELAAEAAGNLVGP RDFVSVRC AKRRGSTCVL AGMATDFGNMP  
 EQKGVIRAEHGPTCMVLHPLAGSPSKTKLTWLLSIDLKGWLPKSIINQVLSQTQVDFANHLRKRLESHPA  
 SEARC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6306\\_a02.zip](https://cdn.origene.com/chromatograms/mk6306_a02.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_000349

**ORF Size:** 855 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\\_000349.3](#)

**RefSeq Size:** 2695 bp

**RefSeq ORF:** 858 bp

**Locus ID:** 6770

**UniProt ID:** [P49675](#)

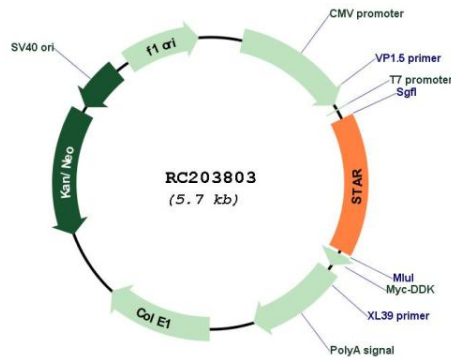
**Cytogenetics:** 8p11.23

**Protein Families:** Druggable Genome

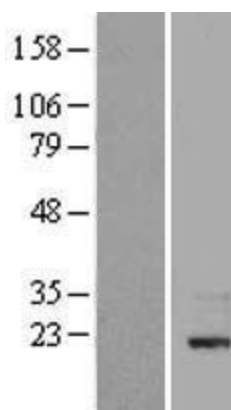
**MW:** 31.9 kDa

**Gene Summary:** The protein encoded by this gene plays a key role in the acute regulation of steroid hormone synthesis by enhancing the conversion of cholesterol into pregnenolone. This protein permits the cleavage of cholesterol into pregnenolone by mediating the transport of cholesterol from the outer mitochondrial membrane to the inner mitochondrial membrane. Mutations in this gene are a cause of congenital lipid adrenal hyperplasia (CLAH), also called lipid CAH. A pseudogene of this gene is located on chromosome 13. [provided by RefSeq, Jul 2008]

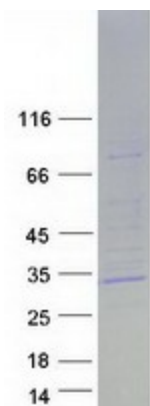
### Product images:



Circular map for RC203803



Western blot validation of overexpression lysate (Cat# [LY424767]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203803 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified STAR protein (Cat# [TP303803]). The protein was produced from HEK293T cells transfected with STAR cDNA clone (Cat# RC203803) using MegaTran 2.0 (Cat# [TT210002]).