

## Product datasheet for **RC223123**

### STARD4 (NM\_139164) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** STARD4 (NM\_139164) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** STARD4  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RC223123 representing NM\_139164  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAAGGCCTGTCTGATGTTGCTTCTTTTGAACCTAACTTAAAAACACTCTCATCCAGTACCATAGCA  
TTGAAGAAGATAAGTGGCGAGTTGCTAAGAAAACGAAAGATGTAAGTGTGGAGAAAACCTCAGAAGA  
ATTTAATGGATATCTCTACAAAGCCCAAGGTGTTATAGATGACCTTGCTATAGTATAATAGCCATATA  
CGCCAGGGCCTTGTCTGTTGGATTGGGACAGCTTGATGACTTCTTTGGATATTCTGGAGAACTTTGAAG  
AGAATTGCTGTGTGATGCGTTACTACTGCTGGTCAGCTTTGGAATATAATTTCCCAAGAGAATTTGT  
TGATTTCTCTATACTGTGGCTATAAAGAAGGCTTTTATCTTGTGGAATAAGTCTTGACTGGGATGAA  
AAGAGACCAGAATTTGTCGAGGATATAACCATCCCTGTGGTTGGTTTTGTGTTCCACTTAAGACAACC  
CAAACCAGAGTCTTTTGACAGGATATATTCAGACAGATCTGCGTGGGATGATTCTCAGTCTGCGGTAGA  
TACAGCCATGGCAAGCACTTTAACCAACTTCTATGGTGATTTACGAAAAGCTTTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC223123 representing NM\_139164  
Red=Cloning site Green=Tags(s)

MEGLSDVASFATKLNKTLIQYHSIEEDKWRVAKKTKDVTVWRKPSEEFNGYLKQAQGVIDDLVYSIIDHI  
RPGPCRLDWSLMTSLDILENFEENCVMRYTTAGQLWNIISPREFVDFSYTVGYKEGLLSCGISLDWDE  
KRPEFVRGYNHPCGWFVPLKDNPNQSLLTGYIQTDLRGMIPQSAVDTAMASTLTNFGDLRKAL

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKVV

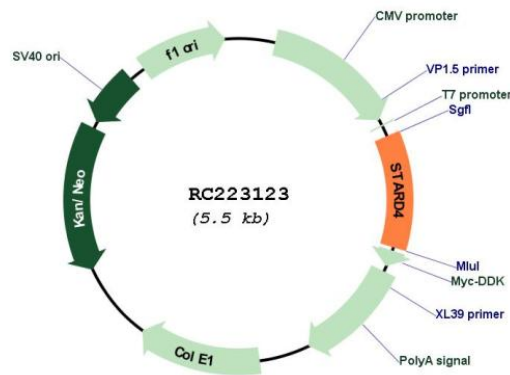
**Chromatograms:** [https://cdn.origene.com/chromatograms/mg4377\\_d03.zip](https://cdn.origene.com/chromatograms/mg4377_d03.zip)

**Restriction Sites:** SgfI-MluI



[View online >](#)

**Cloning Scheme:**

**Plasmid Map:**


**ACCN:** NM\_139164

**ORF Size:** 615 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\\_139164.3](#)

**RefSeq Size:** 2264 bp

**RefSeq ORF:** 618 bp

**Locus ID:** 134429

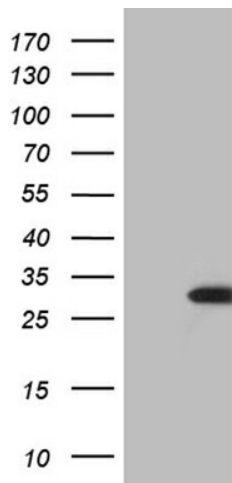
**UniProt ID:** [Q96DR4](#)

**Cytogenetics:** 5q22.1

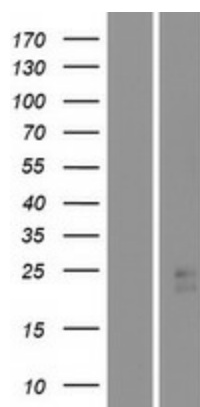
**MW:** 23.3 kDa

**Gene Summary:** Cholesterol homeostasis is regulated, at least in part, by sterol regulatory element (SRE)-binding proteins (e.g., SREBP1; MIM 184756) and by liver X receptors (e.g., LXRA; MIM 602423). Upon sterol depletion, LXRs are inactive and SREBPs are cleaved, after which they bind promoter SREs and activate genes involved in cholesterol biosynthesis and uptake. Sterol transport is mediated by vesicles or by soluble protein carriers, such as steroidogenic acute regulatory protein (STAR; MIM 600617). STAR is homologous to a family of proteins containing a 200- to 210-amino acid STAR-related lipid transfer (START) domain, including STARD4 (Soccio et al., 2002 [PubMed 12011452]).[supplied by OMIM, Mar 2008]

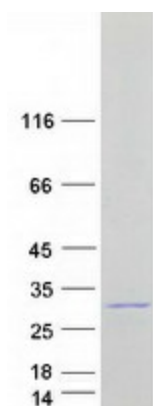
**Product images:**



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY STARD4 (Cat# RC223123, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-STARD4 (Cat# [TA810512])(1:2000). Positive lysates [LY408367] (100ug) and [LC408367] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY408367]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223123 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified STARD4 protein (Cat# [TP323123]). The protein was produced from HEK293T cells transfected with STARD4 cDNA clone (Cat# RC223123) using MegaTran 2.0 (Cat# [TT210002]).