

Product datasheet for RC208318

C19orf56 (WDR83OS) (NM_016145) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: C19orf56 (WDR83OS) (NM_016145) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: C19orf56
Synonyms: ASTERIX; C19orf56; PTD008
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC208318 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCACTAACAAATATGTCGGACCCACGGAGGCCGAACAAAGTCTGAGGTACAAGCCCCGCCGAGCG
AATGTAACCCGGCCTTGGACGCCGACTACATGAACCTGCTGGGCATGATCTTCAGCATGTG
CGGCCTCATGCTAAGCTGAAGTGGTGTGCTTGGGTCGCTGTCTACTGCTCCTTCATCAGCTTTGCCAAC
TCTCGGAGCTCGGAGGACACGAAGCAAATGATGAGTAGCTTCATGCTGTCCATCTCTGCCGTGGTATGT
CCTATCTGCAGAATCCTCAGCCCATGACGCCCCCATGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC208318 protein sequence
 Red=Cloning site Green=Tags(s)
 MSTNMSDPRRPNKVLRYKPPPSECNPALDDPTPDYMNLLGMIFSMCGLMLKWKCAWVAVYCSFISFAN
 SRSSSEDTKQMMSSFMLSISAVVMSYLQNPQPMTPPW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6556_e04.zip

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_016145

ORF Size: 318 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_016145.4](#)

RefSeq Size: 861 bp

RefSeq ORF: 321 bp

Locus ID: 51398

UniProt ID: [Q9Y284](#)

Cytogenetics: 19p13.13

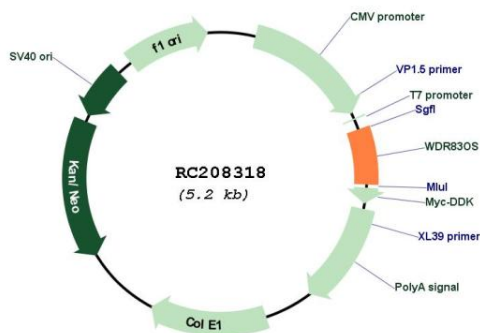
Domains: UPF0139

Protein Families: Transmembrane

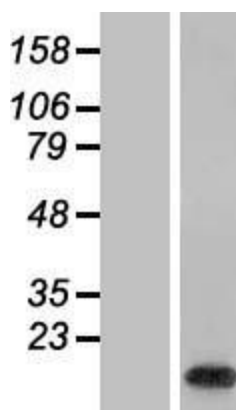
MW: 12.1 kDa

Gene Summary: Component of the PAT complex, an endoplasmic reticulum (ER)-resident membrane multiprotein complex that facilitates multi-pass membrane proteins insertion into membranes (PubMed:32814900). The PAT complex acts as an intramembrane chaperone by directly interacting with nascent transmembrane domains (TMDs), releasing its substrates upon correct folding, and is needed for optimal biogenesis of multi-pass membrane proteins (PubMed:32814900). WDR83OS/Asterix is the substrate-interacting subunit of the PAT complex, whereas CCDC47 is required to maintain the stability of WDR83OS/Asterix (PubMed:12475939, PubMed:32814900). WDR83OS/Asterix associates with the first transmembrane domain (TMD1) of the nascent chain, independently of the N-glycosylation of the chain and irrespective of the amino acid sequence and transmembrane topology of TMD1 (PubMed:12475939, PubMed:32814900). The PAT complex favors the binding to TMDs with exposed hydrophilic amino acids within the lipid bilayer and provides a membrane-embedded partially hydrophilic environment in which TMD1 binds (PubMed:32814900). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC208318



Western blot validation of overexpression lysate (Cat# [LY414158]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208318 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).