

Product datasheet for **RC224274**

STEAP3 (NM_018234) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	STEAP3 (NM_018234) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	STEAP3
Synonyms:	AHMIO2; dudlin-2; dudulin-2; pHyde; STMP3; TSAP6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC224274 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCAGAAGAGATGGACAAGCCACTGATCAGCCTCCACCTGGTGGACAGCGATAGTAGCCTTGCCAAGG
 TCCCCGATGAGGCCCCAAAGTGGGCATCCTGGGTAGCGGGACTTTGCCGCTCCCTGGCCACACGCCT
 GGTGGGCTCTGGCTTCAAAGTGGTGGTGGGAGCCGCAACCCCAAACGCACAGCCAGGCTGTTTCCCTCA
 GCGGCCAAAGTACTTTCAAAGAGGAGGCACTGAGCTCCCGGAGGTCATCTTTGTGGCTGTGTTCCGGG
 AGCACTACTCTTCACTGTGCAGTCTCAGTGACCAGCTGGCGGCAAGATCCTGGTGGATGTGAGCAACCC
 TACAGAGCAAGAGCACCTTCAGCATCGTGAGTCCAATGCTGAGTACCTGGCCTCCCTCTTCCCACTTGC
 ACAGTGGTCAAGGCCCTCAATGTCATCTCTGCCTGGACCCTGCAGGCTGGCCCAAGGATGGTAACAGGC
 AGGTGCCATCTGCGGTGACCAGCCAGAAGCCAAGCGTGTCTCGGAGATGGCGCTGCCATGGGCTT
 CATGCCCGTGGACATGGGATCCCTGGCGTCAGCCTGGGAGGTGGAGGCCATGCCCTGCGCTCCTCCCG
 GCCTGGAAGGTGCCACCTGCTGGCCCTGGGGCTCTTCGTCTGCTTCTATGCCTACAACCTCGTCCGGG
 ACGTTCTGCAGCCCTATGTGCAGGAAAGCCAGAACAAGTTCTTCAAGCTGCCCGTGTCCGTGGTCAACAC
 CAACTGCCGTGCGTGGCCTACGTGCTGCTGCTACTCGTGTACTTGCCCGGCGTGTGGCGGCTGCCCTG
 CAGCTGCGGCGCGGCCACCAAGTACCAGCGCTTCCCGACTGGCTGGACCCTGGCTACAGCACCGCAAGC
 AGATCGGGCTGCTCAGCTTCTTCTGCGCCGCCCTGCACGCCCTCTACAGTTCTGCTTCCCGCTGCGCCG
 CGCCACCGCTACGACCTGGTCAACCTGGCAGTCAAGCAGGTCTTGGCCAACAAGAGCCACCTCTGGGTG
 GAGGAGGAGGTCTGGCGGATGGAGATCTACCTCCTGGGAGTGTGGCCCTCGGCACGTTGTCCTGTC
 TGCCCGTACCTACTGCCGTCATTGCAAACCTCGTCAACTGGAGGGAGTTTAGCTTCGTTGCTCAGTCCG
 ACTGGGCTTTGTGGCCCTCGTGTGCTGAGCACACTGCACACGCTCACCTACGGCTGGACCCGCGCTTCGAG
 GAGAGCCGCTACAAGTTCTACCTGCCTCCACCTTACGCTCACGCTGCTGGTGCCTGCGTCTGATCC
 TGGCCAAAGCCCTGTTTCTCCTGCCCTGCATCAGCCGCAAGTCCGAGGATCCGGAGAGGCTGGGAGAG
 GGAGAGCACCATCAAGTTCACGCTGCCACAGACCAGCCCTGGCCGAGAAGACGAGCCACGTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC224274 protein sequence
 Red=Cloning site Green=Tags(s)

MPEEMDKPLISLHLVDSDSLAKVPDEAPKVGILGSGDFARSLATRLVSGFKVTVVGSRNPKRTARLFPS
 AAQVTFQEEAVSSPEVIFVAVFREHYSSLCSLSDQLAGKILVDVSNPTEQEHQHRESNAEYLASFPTC
 TVVKAFNVISAWTLQAGPRDGNRQVPICGDQPEAKRAVSEMALAMGFMPVDMGSLASAWVEAMPLRLLP
 AWKVPTLLALGLFVCFYAYNFVRDVLQPYVQESQNKFFKLPVSVVNTTLPVAYVLLSLVYLPGLAAAL
 QLRRGTYQRFDPDLHWLQHRKQIGLLSFFCAALHALYSFCLPLRRAHRYDLVNLAVKQVLANKSHLWV
 EEEVWRMEIYLSLGVLAGLTLALLAVTSLPSIANSLNWREFSFVQSSLGFVALVSTLHLLTYGWTRAFE
 ESRKYFYLPTFTLLVPCVVILAKALFLLPCISRRLARIRRGWERESTIKFTLPTDHALAEKTSHV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6599_g05.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_018234

ORF Size: 1464 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_018234.3](#)
RefSeq Size: 3938 bp

RefSeq ORF: 1467 bp

Locus ID: 55240

UniProt ID: [Q658P3](#)
Cytogenetics: 2q14.2

Domains: F420_oxidored

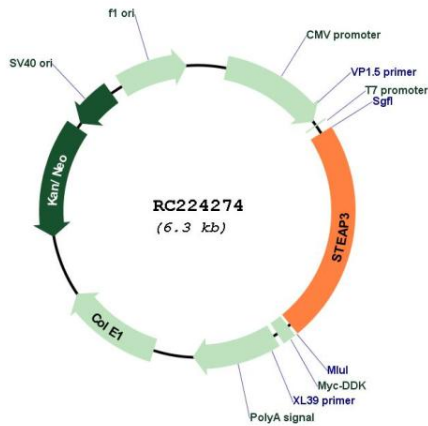
Protein Families: Transmembrane

Protein Pathways: p53 signaling pathway

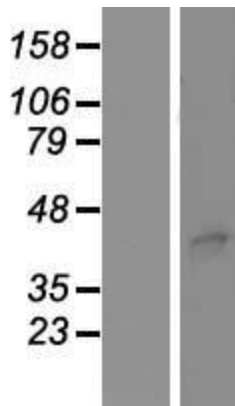
MW: 54.6 kDa

Gene Summary: This gene encodes a multipass membrane protein that functions as an iron transporter. The encoded protein can reduce both iron (Fe³⁺) and copper (Cu²⁺) cations. This protein may mediate downstream responses to p53, including promoting apoptosis. Deficiency in this gene can cause anemia. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2015]

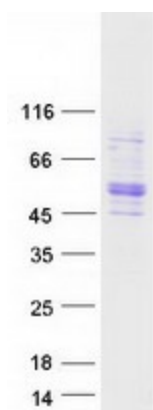
Product images:



Circular map for RC224274



Western blot validation of overexpression lysate (Cat# [LY413214]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224274 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified STEAP3 protein (Cat# [TP324274]). The protein was produced from HEK293T cells transfected with STEAP3 cDNA clone (Cat# RC224274) using MegaTran 2.0 (Cat# [TT210002]).