

Product datasheet for **RR215648**

Steap4 (NM_001044265) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Steap4 (NM_001044265) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Steap4
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>RR215648 representing NM_001044265
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGAAGCGTGTGCAGATGAGTTTCCTCTGACTGTGGATTCCTCAGAAAAGCAAGCGTTGTCTGCA
 TTTTCGGAACAGGGGATTTTCGGGAATCATTGGGGTTGAAAATGCCTCAGTGTGGCTATTCTGTTGTTTT
 CGGGAGTCGAAACCCCGAGTATCCAGCCTTCTGCCAGGGGAGCAGAGGTCCTGTGCTACTCAGAAAGCA
 GCATCGAGGTCTGACGTATAGTCTGGCCGTGCACAGAGCATTATGATTTCTCGCAGAATTAGCTG
 ATTCTCTCAAAGGAAGAGTATTGATAGATGTCAGTAACAACCAAAAAATGAATCAGTATCCAGAATCAA
 CGCCGAGTACCTTGCTCAGCTGGTACCAGGAGCCACGTGGTCAAGGCATTTAACACCATCTCAGCCTGG
 GCTCTCCAGTCAGGAACACTAGATGCAAGTCGGCAGGTGTTTGTCTGTGGAAATGACAGCAAAGCCAAGG
 ACAGAGTATGGACATTGCTCGCACTCTGGGCTCACTCCACTGGATCAAGGATCTCTCGTGGCAGCCAA
 GGAATTGAAAACCTCCTGCAACTATTTCCCATGTGGAGTTCCTTTCTACTTGTCTCTGGGCTG
 TCGCTCTTCTTTGTGTACTGCGCTATACGGGAAGTATATACCCTACGTGACTGGGAAGACAGATA
 GTACGTACCGCCTGGTTGTTCCATCCCGAATCGTGTCTTTCCTATAACAGCACTTACCCTGCTGGCGTT
 GGTGTACCTCCCTGGTATTCTCGCCGCCATTTGCAGCTCTACCGAGGCACAAAGTACCGCCGATTTCCCA
 AACTGGCTTGACCATTGGATGCTTTCAGAAAGCAACTGGGCTTGGTAGCTCTGGGATTTGCCTTCTTC
 ACGCCATCTACACCCTTGATTCTTCTTACTACGTACGATGGAGGCTGAGAAACGCGACCATTAC
 TCAGGCCCTAACTAATAAAGACAGCCATTTCAGTTCCTCTACTGCCTGGCTCAGTATTCTATCTGGCC
 CTGGGAATTCTGGGATTTTTCTGTTTCTCTCTTGGGAATCACTTCTTGCATCAGTAAGCAACATGG
 TCAACTGGAGAGAGTTCGGTTTGTCCAGTCCAAACTGGGTTATCTGACCCTGGTCTTGTGCACAGCCCA
 CACTTTGGTGTATGGTGGAAAGAGATTCCTCAGCCCTTCAATTCTAATATGGAGCCTTCTTCAGCCTAT
 ATTCTGGCGCTCATCATCCCTGCACAGTGTGGTGTGAAAGTTATCCTCATCATGCCGTGCATAGACA
 AGACCCTCAGCGCATCCGCCAGGGCTGGGAAAGGAAGTCAAATATGCACAATCAACACTGAACGGAAA
 ATCGGATATT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR215648 representing NM_001044265
 Red=Cloning site Green=Tags(s)

MEKTCADFFPLTVDSSEKQGVVCFGTGDFGKSLGLKMLQCGYSVVFGRNPQVSSLLPRGAEVLCYSEA
 ASRSDVIVLAVHREHYDFLAELADSLKGRVLIDVSNQKMNQYSPESNAEYLAQLVPGAHVVKAFNTISAW
 ALQSGTLDASRQVFVCGNDSKAKDRVMDIARTLGLTPLDQGSVAAKEIENYPLQLFPMWRFPFYLSSGL
 CVFFFVYCAIREVIYPYVTGKTDSTYRLVVSIPNRVFPITALLLALVYLPGILAAILQLYRGTKYRRFP
 NWLDHWMLCRKQLGLVALGFAFLHAIYTLVIPIRYVWRWRNATITQALTNKDSPFSSSTAWLSDSYLA
 LGILGFFLFLLLGITSLSVSNMVMNWRFRFVQSKLGYLTLVLCTAHTLVYGGKRFLSPSILIWLSLPSAY
 ILALIIPCTVLVMKFIIMPICDKLTRIRQGWERKSKYAQSTLNGKSDI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

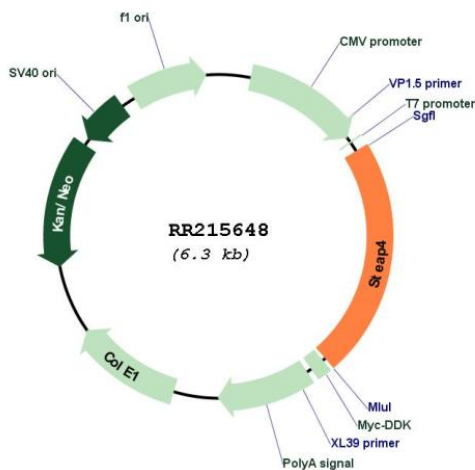
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001044265

ORF Size: 1410 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_001044265.1](#), [NP_001037730.1](#)

RefSeq Size: 3112 bp

RefSeq ORF: 1413 bp

Locus ID: 499991

UniProt ID: [Q4V8K1](#)

Cytogenetics: 4q12

MW: 52.8 kDa

Gene Summary: Integral membrane protein that functions as NADPH-dependent ferric-chelate reductase, using NADPH from one side of the membrane to reduce a Fe(3+) chelate that is bound on the other side of the membrane. Mediates sequential transmembrane electron transfer from NADPH to FAD and onto heme, and finally to the Fe(3+) chelate (PubMed:23733181). Can also reduce Cu(2+) to Cu(1+) (PubMed:23733181). Plays a role in systemic metabolic homeostasis, integrating inflammatory and metabolic responses (By similarity). Associated with obesity and insulin-resistance (By similarity). Involved in inflammatory arthritis, through the regulation of inflammatory cytokines (By similarity). Inhibits anchorage-independent cell proliferation (By similarity).[UniProtKB/Swiss-Prot Function]