

## Product datasheet for **MG207521**

### Steap4 (NM\_054098) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Steap4 (NM_054098) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Steap4
Synonyms:	1110021O17Rik; AI481214; Tiarp; Tnfaip9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG207521 representing NM\_054098  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGAAAGCACATGCAGATGAGTTTCCTCTGACTACTGATTCCTCAGAAAAGCAAGGGTGTCTGCA  
 TTTTCGGAACAGGGGATTTTCGGGAAGTCACTGGGATTGAAAATGCCTCAGTGTGGCTATTCTATCGTTTT  
 TGGGAGTCGAAACCCCGAGTGTCCAGCCTTCTGCCAGGGGGCAGAGGTCCTGAGCTATTTCGGAAGCA  
 GCATCCAAGTCTGACATCATAATCCTAGCCATGCACAGAGCACTATGATTCCTCACGGAAGTGTG  
 ATTATCTCAAAGGAAAAGTATTGGTAGACGTCAGTAACAACCGCAAAAATCAATCAGTATCCAGAGTCAA  
 TGCGGAATACCTTGCTCAGCTGGAGCCAGGAGCCACGTGGTCAAAGCATTTAACACCATCTCAGCCTGG  
 GCTCTCCAGTCAGGAACACTAGATGCAAGCCGGCAGGTGTTTGTCTGTGGAAATGACAGCAAGGCCAAAC  
 AAAGAGTAATGGACATTGCTCGTACTCTGGGCTCACCCACTGGACCAAGGATCTCTCATGGCAGCCAG  
 TGAATTGAAAACCTCCTGCAACTATTTCCAATGTGGAGTTTCTTTCTATTTGTCCTCTGTGCTG  
 TCGCTCTTCTTTGTGTACTGTGCAATACGAGAGGTGATATACCCCTACGTGAATGGGAAAACAGATG  
 CTACGTACCGCCTGGCCATTTCCATCCCGAATCGTGTCTTTCCTATAACAGCACTGATCCTGCTTGCCCT  
 GGTGTACCTCCCTGGTATTCTCGCTGCCATTCTGCAGCTCTATCGAGGCACAAAGTACCGCCGATCCCCA  
 AACTGGCTTGACCATTGGATGCTTTCAGAAAGCAACTGGGCTTGGTAGCTCTGGGATTTGCCTTCTTC  
 ATGTCACTACACACTTGTGATTCTATCCGTTACTATGTTTCGATGGAGGCTGAGAAATGCAACCATTAC  
 TCAGGCCCTAACTAATAAAGACAGCCATTTATTACCTCTATGCCTGGATTAATGATTCCTACTTGGCG  
 CTGGGAATCCTGGGATTTTTCTGTTCTTCTGTTGGGAATCACTCCTTGCCATCAGTAAGCAACATGG  
 TCAACTGGAGAGAGTTCGGTGTTCAGTCCAACTGGGTTATCTGACCCTGGTCTTGTGCACAGCCCA  
 CACTTTGGTGTATGGCGAAAGAGATTCCCTCAGCCCTTCGATTCTAAGGTGGAGCCTCCCTTCGGCTTAT  
 ATTTTGGCACTCGTCATCCCTGCGCAGTGTGGTGTGAAGTCATCCTCATGATGCCATGCATAGACA  
 AGACCCTCACTCGCATCCGCCAGGGCTGGGAAAGAACTCAAAGTACACACAATCAGCACTGAACGGAAA  
 ATCGGATATT

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>MG207521 representing NM\_054098  
 Red=Cloning site Green=Tags(s)

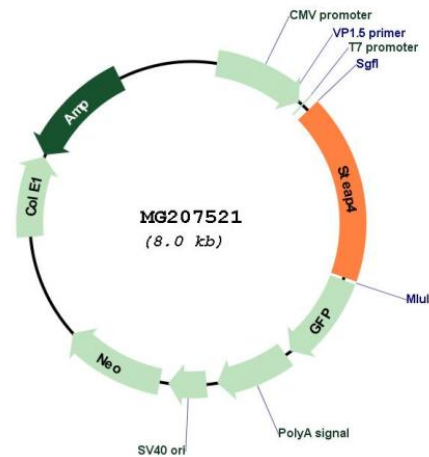
MEKAHADEFPLTDSSEKQGVVCFGTGDFGKSLGLKMLQCGYSIVFGSRNPQVSSLLPRGAEVLSYSEA  
 ASKSDIIILAMHREHYDSLTELVDYLKGVKLVDSVNNRKINQYSPESNAEYLAQLEPGAHVVKAFNTISAW  
 ALQSGTLDASRQVFVCGNDSKAKQRVMDIARTLGLTPLDQGLMAASEIENYPLQLFPMWRFPFYLSVVL  
 CVFFFVYCAIREVIYPYVNGKTDATYRLAISIPNRVFPITALILLALVYLPGILAAIQLYRGTKYRRFP  
 NWLDHWMLCRKQLGLVALGFAFLHVIYTLVPIRIYYRWRLRNATITQALTNKDSPFITSYAWINDSYLA  
 LGILGFFLFLLLGITSLSVSNMNVNREFRFVQSKLGYLTLVLCTAHTLVYGGKRFLSPSILRWSLPSAY  
 ILALVIPCAVLVLCILIMPCIDKTLTRIRQGWERNISKYTSALNGKSDI

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**

**Plasmid Map:**


**ACCN:** NM\_054098

**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\\_054098.2](#)

**RefSeq Size:** 3140 bp

**RefSeq ORF:** 1413 bp

**Locus ID:** 117167

**UniProt ID:** [Q923B6](#)

**Cytogenetics:** 5 A1

**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 (PubMed:16609065). Mediates sequential transmembrane electron transfer from NADPH to FAD and onto heme, and finally to the Fe(3+) chelate (By similarity). Can also reduce Cu(2+) to Cu(1+) (PubMed:16609065). Plays a role in systemic metabolic homeostasis, integrating inflammatory and metabolic responses (PubMed:17482547). Associated with obesity and insulin-resistance (By similarity). Involved in inflammatory arthritis, through the regulation of inflammatory cytokines (PubMed:19660107). Inhibits anchorage-independent cell proliferation (By similarity).[UniProtKB/Swiss-Prot Function]