

## Product datasheet for **SC111694**

### **Staufen (STAU1) (NM\_004602) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Staufen (STAU1) (NM_004602) Human Untagged Clone
Tag:	Tag Free
Symbol:	Staufen
Synonyms:	PPP1R150; STAU
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >OriGene ORF within SC111694 sequence for NM\_004602 edited (data generated by NextGen Sequencing)

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ATGAACTTGGAAAAACCAATGTATAAGCCTGTTGACCCTACTCTCGGATGCAGTCC
ACCTATAACTACAACATGAGAGGAGGTGCTTATCCCCCGAGTACTTTTACCCATTTCCA
GTTCCACCTTTACTTTATCAAGTGGAACTTTCTGTGGGAGGACAGCAATTAATGGCAAA
GGAAAGACAAGACAGGCTGCGAAACACGATGCTGCTGCCAAAGCGTTGAGGATCTGCAG
AATGAGCCCTGCCAGAGAGGCTGGAGGTGAATGGAAGAGAATCCGAAGAAGAAAAATCTC
AATAAATCTGAAATAAGTCAAGTGTGAGATTGCACTTAAACGGAACCTGCCTGTGAAT
TTCGAGGTGGCCCGGAGAGTGGCCACCCACATGAAGAAGTTTGTGACCAAGTTTTCG
GTTGGGGAGTTTGTGGGGAAAGGTGAAGGGAAAAGCAAGAAGATTTCAAAGAAAAATGCC
GCCATAGCTGTTCTTGGAGAGCTGAAGAAGTTACCGCCCTGCCTGCAGTTGAACGAGTA
AAGCCTAGAATCAAAAAGAAAACAAAACCCATAGTCAAGCCACAGACAAGCCAGAATAT
GGCCAGGGATCAATCCGATTAGCCGACTGGCCAGATCCAGCAGGCAAAAAAGGAGAAG
GAGCCAGAGTACACGCTCCTCACAGAGCGAGGCCCTCCCGCCGCGAGGGAGTTTGTGATG
CAGGTGAAGTTGAAACACACTGCAGAAGGAACGGGCACCAACAAGAAGGTGGCCAAG
CGCAATGCAGCCGAGAACATGCTGGAGATCCTTGGTTTCAAAGTCCCGCAGGCGCAGCCC
ACCAAACCCGCACTCAAGTCAGAGGAGAAGACACCCATAAAGAAACCAGGGGATGGAAGA
AAAGTAACCTTTTTTGAACCTGGCTCTGGGGATGAAAATGGGACTAGTAATAAAGAGGAT
GAGTTCAGGATGCCTTATCTAAGTCATCAGCAGCTGCCTGCTGGAATTCTTCCCATGGTG
CCCAGGTCGCCAGGCTGTAGGAGTTAGTCAAGGACATCACACCAAAGATTTTACCAGG
GCAGCTCCGAATCCTGCCAAGGCCACGGTAACTGCCATGATAGCCCGAGAGTTGTGTAT
GGGGCACCTCGCCACAGCCGAGACATTTTAAAGAATAACATCTTCCAGGCCACGTA
CCCCATGGACCTCACAGAGCCCTCTGAGCAACTGGACTATCTTCCAGAGTCCAGGGA
TTCAGGTTGAATACAAAGACTTCCCCAAAAACAACAAGAACGAATTTGTATCTCTTATC
AATTGCTCCTCTCAGCCCTCTGATCAGCCATGGTATCGGCAAGGATGTGGAGTCTGC
CATGATATGGCTGCGCTGAACATCTTAAAGTTGCTGTCTGAGTTGGACCAACAAGTACA
GAGATGCCAAGAACAGGAAACGGACCAATGTCTGTGTGGGAGGTGCTGA
    
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Clone variation with respect to NM\_004602.2

**5' Read Nucleotide Sequence:**

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>OriGene 5' read for NM_004602 unedited
NGTTTGAATTTGTATACGACTCCTATAGGGCGGCCGGAATCGGCACGAGGCCGGCGGCT
GCCGCGTCTCTCTCGGCTCCCGCTTCTTTGACCGCCTCCCCCCCCGGCCCGGCGGCGC
CCGCTCCTCCACGGCACTCCGCTCTTCCCTCCCTTCGTCCCTTCTTCTCTCCCTTT
TTTCTTCTTCTTCCCTCCTCGCCGCCACCGCCAGGACCGCCGGCCGGGGGACGAGC
TCGGAGCAGCAGCCAGAGTTTATTAACCACTTAACCTCTCAGAAGTGAACAAAGACAACA
TTGTTCCCTGGAACGCCCTTTTTTAAAAAAGAAAGCATAACCCCTACTGTAGAATAAAT
GCACTGTGCATGAACTTGGAAAAAACCAATGTATAAGCCTGTTGACCCTTACTCTCGG
ATGCAGTCCACCTATAACTACAACATGAGAGGAGGTGCTTATCCCCCGAGTACTTTTAC
CCATTTCCAGTTCACCTTTACTTTATCAAGTGGAACTTTCTGTGGGAGGACAGCAATTT
AATGGCAAAGGAAAGACAAGACAGGCTGCGAAACACGATGCTGCTGCCAAAGCGTTGAGG
ATCCTGCAGAATGAGCCCTGCCAGAGAGGCTGGAGGTGAATGGAAGAAGATCCGAAGAA
GAAATCTCAATAAATCTGAAATAAGTCAAGTGTGAGAAATGCACTTAAACGGAACTGC
CTGTGAATTTGAGGTGGCCCGGAGAGTGGNCCACCCACATGAAAGAAGTTGTGACCA
AGNTTTCGGTTGGNNGAAGTTTGTGGGGAAAGGTGAAAGGGAAAGCNAGAAGATTNCAAG
AANAAAGCCGCATAGCTGNTCTTGAGGAGCTGAAGAAATTACCGCCCTGCCTGCAGNT
GAACAG
    
```

<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_004602 unedited GCCGCAATCTAAAGTCGAGTTTTTTTTTTTTTTTTTTAATTAGTAGCTGTTTATTGATCA ATGGTTTGATATAAAGTTATTTTCAGATCTTCAGACTTTTGCCAGATGGAATCACAAGCA TTACAAAGTTTTTCTTAAAAATAAAAAAAGGATAGGGGCAAGTTGGGAGGGGACCAACC TAGCAGTAGTGGCATTGAGAATAAATTAACAAAAAATTTAGTATTACCATTTATTGAT GACAAACACTTAAGTTTTACTTACATTCATGGGGAGAAAAATTCAGCGTAAACAATGA ATGGAAGCAGTACTTAACCTCGCAGGGCTACCAGGCTTTCCATACGGACCACACGAGAGC CTCAGTGACACACTTCTGTGTACAGTAACACAACATCAAAAGCAACACAGCTGTATACA GAAACGTAGGTCATTCTTTTCAGCCCTAATGGAGATGTAATTAACAGTATCGAGCACTCT GGAAAATCACTCTGCAGGTTTATATGGACTACATGGAGATCATATCCTGTAGTGTAGTGA AAGCTAAGTCCTCAAGAGCCATATGTATAGATACACAATGCTTTTTAATAATCTTAAAA CAGAGATCAAAGTTCATTTAAGTCCTGTTTTGCTTAACAAAAATAAAAAATGAAATAAAA TGGACCAAATGATCTTCCAAGTTTAAAAATCCTAATTGCCCATTTATACAACACTGTGGGA AGACTAATTAAGTTTTTTTAAAGCCAGGACTGGTTTACCTTGACCAAAGGGCCACAT TTGCATTACTGAAACCGTCTGGGTAACCAATGAAATAAAATGGTTACCCAATACACC GGATTTGAACTTTGCCGGTAAAAATAATTGAAAAGTCAGTTAAGAAAGTTCCAAACGGGG CTTTTAACTAAATCAATTGGAAAATTTCAATGGAACATTTTTTCGGGCCTATCAT
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_004602
<b>Insert Size:</b>	3460 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_004602.1</a></u> , <u><a href="#">NP_004593.1</a></u>
<b>RefSeq Size:</b>	3349 bp
<b>RefSeq ORF:</b>	1491 bp
<b>Locus ID:</b>	6780
<b>UniProt ID:</b>	<u><a href="#">O95793</a></u>
<b>Cytogenetics:</b>	20q13.13
<b>Domains:</b>	DSRM

**Gene Summary:**

Staufen is a member of the family of double-stranded RNA (dsRNA)-binding proteins involved in the transport and/or localization of mRNAs to different subcellular compartments and/or organelles. These proteins are characterized by the presence of multiple dsRNA-binding domains which are required to bind RNAs having double-stranded secondary structures. The human homologue of staufen encoded by STAU, in addition contains a microtubule-binding domain similar to that of microtubule-associated protein 1B, and binds tubulin. The STAU gene product has been shown to be present in the cytoplasm in association with the rough endoplasmic reticulum (RER), implicating this protein in the transport of mRNA via the microtubule network to the RER, the site of translation. [provided by RefSeq, Apr 2020]

Transcript Variant: This variant (T4) has an additional exon in the 5' UTR compared to T2, the most abundantly expressed transcript variant. T4 encodes the same isoform (a) of 496 amino acids as T2.