

## Product datasheet for **RG208387**

### **Staufen (STAU1) (NM\_017453) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Staufen (STAU1) (NM_017453) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Staufen
Synonyms:	PPP1R150; STAU
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG208387 representing NM\_017453  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTCTCAAGTTC AAGTGAAGTTCAGAACCCATCTGCTCTCTCAGGGAGCCAAATACTGAACAAGA  
 ACCAGTCTCTTCTCACAGCCTTTGATGAGTATTCTTCTACTACTAGCTCTCTGCCCTCTGAAAATGC  
 AGGTAGACCCATTCAAACTCTGCTTTACCTCTGCATCTATTACATCCACCAGTGCAGCTGCAGAAAGC  
 ATAACCCCTACTGTAGAATAAATGCACGTGTCATGAACTTGGAAAAAACCAATGTATAAGCCTGTTG  
 ACCCTTACTCTCGGATGCAGTCCACCTATAACTACAACATGAGAGGAGGTGCTTATCCCCGAGGTACTT  
 TTACCCATTTCCAGTTCACCTTACTTTTCAAGTGGAACTTTCTGTGGGAGGACAGCAATTTAATGGC  
 AAAGGAAAGACAAGACAGGCTGCGAAACACGATGCTGCTGCCAAAGCGTTGAGGATCCTGCAGAATGAGC  
 CCCTGCCAGAGAGGCTGGAGGTGAATGGAAGAGAATCCGAAGAAGAAAATCTCAATAAATCTGAAAATAG  
 TCAAGTGTGGAGATTGCACTTAAACGGAACCTGCTGTGAATTCGAGGTGGCCCGGAGAGTGGCCCA  
 CCCACATGAAGAACTTTGTGACCAAGTTTCGGTTGGGGAGTTGTGGGGGAAGGTGAAGGAAAAGCA  
 AGAAGATTTCAAAGAAAATGCCGCCATAGCTGTTCTTGAGGAGCTGAAGAAGTTACCGCCCTGCCTGC  
 AGTTGAACGAGTAAAGCCTAGAATCAAAAAGAAAACAAAACCCATAGTCAAGCCACAGACAAGCCAGAA  
 TATGGCCAGGGATCAATCCGATTAGCCGACTGGCCAGATCCAGCAGGCAAAAAGGAGAAGGAGCCAG  
 AGTACACGCTCCTCACAGAGCGAGGCTCCCGCCGCGCAGGGAGTTTGTGATGCAGGTGAAGTTGGAAA  
 CCACACTGCAGAAGGAACGGGCACCAACAAGAAGTGGCAAGCGCAATGCAGCCGAGAACATGCTGGAG  
 ATCCTTGGTTTCAAAGTCCCGCAGGCGCAGCCACCAAAACCCGCACTCAAGTCAAGGAGAAGACACCCA  
 TAAAGAACCAGGGGATGGAAGAAAAGTAACTTTTTTGAACCTGGCTCTGGGGATGAAAATGGACTAG  
 TAATAAAGAGGATGAGTTCAGGATGCCTTATCTAAGTCATCAGCAGCTGCCTGCTGGAATTTCTCCCATG  
 GTGCCCGAGGTCGCCAGGCTGTAGGAGTAGTCAAGGACATCACACCAAGATTTTACCAGGGCAGCTC  
 CGAATCCTGCCAAGGCCACGGTAACTGCCATGATAGCCCGAGAGTTGTTGTATGGGGCACCTCGCCAC  
 AGCCGAGACCATTTTAAAGAATAACATCTCTCAGGCCACGTACCCCATGGACCTCTCACGAGACCTCT  
 GAGCAACTGGACTATCTTCCAGAGTCCAGGGATTCCAGGTTGAATACAAAGACTTCCCCAAAACAACA  
 AGAACGAATTTGTATCTTATCAATTGCTCTCTCAGCCACCTCTGATCAGCCATGGTATCGGCAAGGA  
 TGTGGAGTCTGCCATGATATGGCTGCGCTGAACATCTTAAAGTTGCTGTCTGAGTTGGACCAACAAGT  
 ACAGAGATGCCAAGAACAGGAAACGGACCAATGTCTGTGTGGGAGGTGC

**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA**

**Protein Sequence:**

>RG208387 representing NM\_017453  
 Red=Cloning site Green=Tags(s)

MSQVQVQVQNPAAALSGSQILNKNQSLLSQPLMSIPSTTSSLPSENAGRPIQNSALPSASITSTSAEAES  
 ITPTVELNALCMKLGKKPMYKVPDPYSRMQSTYNYNMRGGAYPPRYFYFPFVPPLLYQVELSVGGQQFNG  
 KGKTRQAAKHDAKALRILQNEPLPERLEVNGRESEENLNKSEISQVFEIALKRNLVNFVARESGP  
 PHMKNFVTKVSVGEFVGEVGEKSKKISKKNAAIAVLEELKLLPPLPAVERVKPRIKKTPIVKPQTSPE  
 YGQGINPISRLAQIQAKKEKEPEYLLTERGLPRRREFVMQVKGVNHTEAGTGNKKVAKRNAENMLE  
 ILGFKVPAQPTKPAKSEKTPIKKPGDGRKVTFFEPGSDENGTSNKEDEFRMPYLSHQQLPAGILPM  
 VPEVAQAVGVSQGHHTKDFTRAAPNPAKATVTAMIARELLYGGTSPETAETILKNNISSGHVPHGPLTRPS  
 EQLDYLRSRVQGFQVEYKDFPKNNKNEFVSLINCSSQPPLISHGIGKDVESCHDMAALNILKLLSELDQQS  
 TEMPRTGNGPMSVCGRC

**TRTRPLE - GFP Tag - V**

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_017453

**ORF Size:** 1731 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\\_017453.4](#)

**RefSeq Size:** 3688 bp

**RefSeq ORF:** 1734 bp

**Locus ID:** 6780

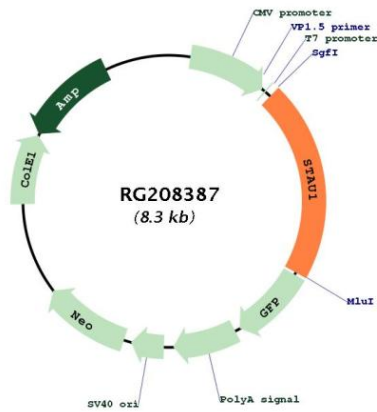
**UniProt ID:** [O95793](#)

**Cytogenetics:** 20q13.13

**Domains:** 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]

**Product images:**



Circular map for RG208387