

Product datasheet for **RG234262**

STEAP2 (NM_001244944) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	STEAP2 (NM_001244944) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	STEAP2
Synonyms:	IPCA1; PCANAP1; PUMPCn; STAMP1; STMP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG234262 representing NM_001244944
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAATCAATCTCTATGATGGGAAGCCCTAAGAGCCTTAGTGAACCTTTTTACCTAATGGCATAAATG
 GTATCAAAGATGCAAGGAAGGTCAGTGTAGGTGATTGGAAGTGAGATTTTGCCAAATCCTTGACCAT
 TCGACTTATTAGATGCGGCTATCATGTGGTCATAGGAAGTAGAAATCCTAAGTTTGCTTCTGAATTTTT
 CCTCATGTGGTAGATGTCACTCATCATGAAGATGCTCTCACAAAAACAAATATAATATTTGTTGCTATAC
 ACAGAGAACATTATACCTCCCTGTGGGACCTGAGACATCTGCTTGTGGTAAAACTCTGATTGATGTGAG
 CAATAACATGAGGATAAACCAGTACCCAGAATCCAATGCTGAATATTTGGCTCATTATCCAGATTCT
 TTGATTGTCAAAGGATTAATGTTGTCTCAGCTTGGGCACTTCAGTTAGGACCTAAGGATGCCAGCCGGC
 AGGTTTATATGTCAGCAACAATATTCAAGCGCGACAACAGGTTATTGAACCTGCCCGCCAGTTGAATTT
 CATTCCCATTGACTTGGGATCCTTATCATCAGCCAGAGAGATTGAAAATTTACCCCTACGACTCTTACT
 CTCTGGAGAGGGCCAGTGGTGGTAGCTATAAGCTTGGCCACATTTTTTTTCTTTTATTCTTTGTCAGAG
 ATGTGATTCATCCATATGCTAGAAACCAACAGAGTGACTTTTACAAAATCCTATAGAGATTGTGAATAA
 AACCTTACCTATAGTTGCCATTACTTTGCTCTCCCTAGTATACCTCGCAGGCTTCTGGCAGCTGCTTAT
 CACTTTATTACGGCACCAAGTATAGGAGATTTCCACCTTGGTTGGAAACCTGGTTACAGTGTAGAAAAC
 AGCTTGGATTACTAAGTTTTTCTTCGCTATGGTCCATGTTGCCTACAGCCTCTGCTTACCGATGAGAAG
 GTCAGAGAGATATTTGTTTCTCAACATGGCTTATCAGCAGGTTTCATGCAAAATTTGAAAACCTTGGAA
 GAGGAAGAAGTTTGGAGAATTGAAATGTATATCTCCTTTGGCATAATGAGCCTTGGCTTACTTTCCCTCC
 TGGCAGTCACCTTCTATCCCTTCAGTGAGCAATGCTTTAACTGGAGAGAATTCAGTTTTTATTCAGTCTAC
 ACTTGGATATGTCGCTCTGCTCATAAGTACTTTCCATGTTTTAATTTATGGATGGAACAGAGCTTTTGAG
 GAAGAGTACTACAGATTTTATACACCACCAAACTTTGTTCTTGCTCTTGTGTTTTGCCCTCAATTGTAATTC
 TGGGTAAGATTATTTTATCCTTCCATGTATAAGCCGAAAGCTAAAACGAATAAAAAAGGCTGGGAAAA
 GAGCCAATTTCTGGAAGAAGGTATGGGAGGAACAATTCCTCATGTCTCCCGGAGAGGGTACAGTAATG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG234262 representing NM_001244944
 Red=Cloning site Green=Tags(s)

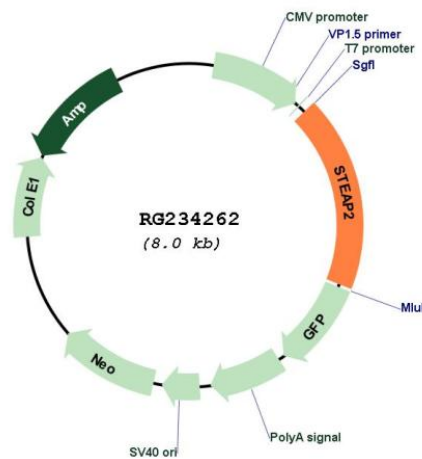
MESISMMGSPKSLSETFLPNGINGIKDARKVTVGVIGSGDFAKSLTIRLIRCGYHVIVIGSRNPKFASEFF
 PHVVDVTHHEDALTKTNIIFVAIHREHYTSLWDLRHLVKGKILIDVSNMNRINQYEPESNAEYLASLFPDS
 LIVKGFNVVSAWALQLGPKDASRQVYICSNNIQARQQVIELARQLNFIPIDLGSLSSAREIENLPLRLFT
 LWRGPVVVAISLATFFFLYSFVRDVIHPYARNQQSDFYKIPIEIVNKTLPIVAITLLSLVYLAGLLAAAY
 QLYYGTKYRRFPWLETWLQCRKQLGLLSFFFAMVHVAYSCLPMRRSERYLFLNMAYQQVHANIENSWN
 EEEVWRIEMYISFGIMSLGLLSLLAVTIPSVSNALNWREFSFIQSTLGYVALLISTFHVLIYGWKRAFE
 EYYRFYTPPNFVLAALVLPISIVILGKIIILFLPCISRKLKRIKKGWEKSQFLEEGMGTIPHVSPERVTVM

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_001244944

ORF Size: 1470 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_001244944.2](#)

RefSeq Size: 7033 bp

RefSeq ORF: 1473 bp

Locus ID: 261729

UniProt ID: [Q8NFT2](#)

Cytogenetics: 7q21.13

Protein Families: Transmembrane

Gene Summary: This gene is a member of the STEAP family and encodes a multi-pass membrane protein that localizes to the Golgi complex, the plasma membrane, and the vesicular tubular structures in the cytosol. A highly similar protein in mouse has both ferrireductase and cupric reductase activity, and stimulates the cellular uptake of both iron and copper in vitro. Increased transcriptional expression of the human gene is associated with prostate cancer progression. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]