

Product datasheet for **RG234149**

STEAP2 (NM_001244945) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	STEAP2 (NM_001244945) 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:

>RG234149 representing NM_001244945
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAATCAATCTCTATGATGGGAAGCCCTAAGAGCCTTAGTGAACCTTTTTACCTAATGGCATAAATG
 GTATCAAAGATGCAAGGAAGTCACTGTAGGTGTGATTGGAAGTGAGATTTTGCCAAATCCTTGACCAT
 TCGACTTATTAGATGCGGCTATCATGTGGTCATAGGAAGTAGAAATCCTAAGTTTGCTTCTGAATTTTT
 CCTCATGTGGTAGATGTCACTCATCATGAAGATGCTCTCACAAAAACAAATATAATATTTGTTGCTATAC
 ACAGAGAACATTATACCTCCCTGTGGGACCTGAGACATCTGCTTGTGGTAAAACTCTGATTGATGTGAG
 CAATAACATGAGGATAAACCAGTACCCAGAATCCAATGCTGAATATTTGGCTTCATTATCCAGATTCT
 TTGATTGTCAAAGATTTAATGTTGTCTCAGCTTGGGCACTTCAGTTAGGACCTAAGGATGCCAGCCGGC
 AGGTTTATATATGAGCAACAATATTCAAGCGCGACAACAGGTTATTGAACTTGCCCGCCAGTTGAATTT
 CATTCCCATTGACTTGGGATCCTTATCATCAGCCAGAGAGATTGAAAATTTACCCCTACGACTCTTACT
 CTCTGGAGAGGGCCAGTGGTGGTAGCTATAAGCTTGGCCACATTTTTTTTCTTTTATTCTTTGTAGAG
 ATGTGATTCATCCATATGCTAGAAACCAACAGAGTGACTTTTACAAAATTCCTATAGAGATTGTGAATAA
 AACCTTACCTATAGTTGCCATTACTTTGCTCTCCCTAGTATACCTCGCAGGCTTCTGGCAGCTGCTTAT
 CACTTTATTACGGCACAAGTATAGGAGATTTCCACCTTGGTTGGAAACCTGGTTACAGTGTAGAAAAC
 AGCTTGGATTACTAAGTTTTTCTCGCTATGGTCCATGTTGCCTACAGCCTCTGCTTACCGATGAGAAG
 GTCAGAGAGATATTTGTTTCTCAACATGGCTTATCAGCAGGTTTCATGCAAAATTTGAAAACCTTGGAA
 GAGGAAGAAGTTTGGAGAATTGAAATGTATATCTCCTTTGGCATAATGAGCCTTGGCTTACTTTCCCTCC
 TGGCAGTCACTTCTATCCCTTCAGTGAGCAATGCTTTAACTGGAGAGAATTCAGTTTTTATCAGTCTAC
 ACTTGGATATGTCGCTCTGCTCATAAGTACTTTCCATGTTTTAATTTATGGATGGAACGAGCTTTTGAG
 GAAGAGTACTACAGATTTTATACACCACAAACTTTGTTCTTGCTCTTGTGTTTTGCCCTCAATTGTAATTC
 TGGATCTTTTGCAGCTTTGCAGATACCCAGAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

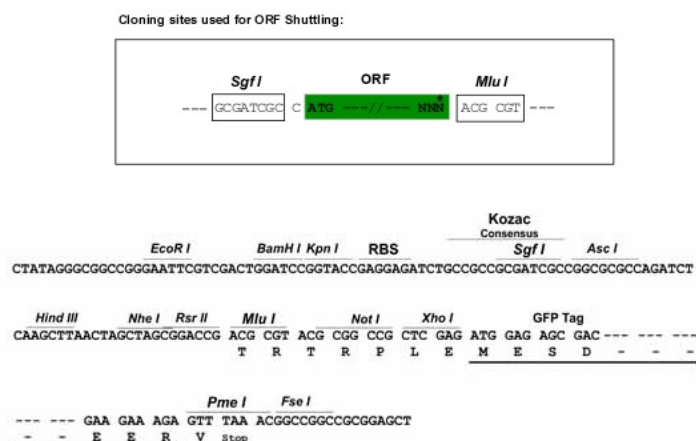
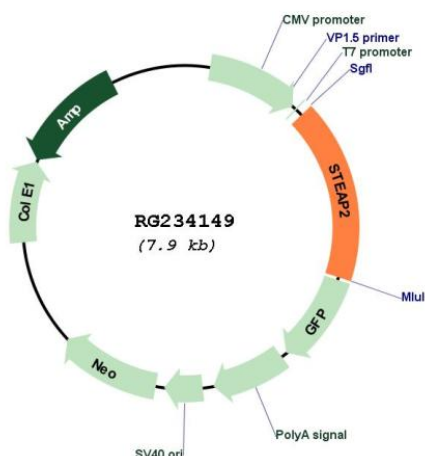
>RG234149 representing NM_001244945
 Red=Cloning site Green=Tags(s)

MESISMMGSPKSLSETFLPNGINGIKDARKVTVGVIGSGDFAKSLTIRLIRCGYHVIVIGSRNPKFASEFF
 PHVVDVTHHEDALTKTNIIFVAIHREHYTSLWDLRHLVKGKILIDVSNMNRINQYEPESNAEYLASLFPDS
 LIVKGFNVVSAWALQLGPKDASRQVYICSNNIQARQQVIELARQLNFIPIDLGSLSSAREIENPLRLFT
 LWRGPVVVAISLATFFFLYSFVRDVIHPYARNQSDFYKIPKIEIVNKTLPIVAITLLSLVYLAGLLAAAY
 QLYYGTKYRRFPWLETWLQCRKQLGLLSFFFAMVHVAYSCLPMRRSERYLFLNMAYQQVHANIENSWN
 EEEVWRIEMYISFGIMSLGLLSLLAVTSIPSVSNALNWREFSFIQSTLGYVALLISTFHVLIYGWKRAFE
 EYYRFYTPPNFVLAIVLPSIVILDLLQLCRYPD

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Plasmid Map:

ACCN:

NM_001244945

ORF Size:

1362 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:	<ol style="list-style-type: none">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:	<u>NM_001244945.2</u>
RefSeq Size:	2514 bp
RefSeq ORF:	1365 bp
Locus ID:	261729
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]