

Product datasheet for SC114906

SAPS2 (PPP6R2) (NM_014678) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SAPS2 (PPP6R2) (NM_014678) Human Untagged Clone
Tag:	Tag Free
Symbol:	SAPS2
Synonyms:	KIAA0685; PP6R2; SAP190; SAPS2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC114906 sequence for NM_014678 edited (data generated by NextGen Sequencing)

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ATGTTCTGGAAGTTTGACTTGAACACCACGTCCCATGTTGACAAGCTGCTGGACAAGGAG
CATGTGACGCTGCAGGAGTTAATGGATGAAGATGACATCTTGACGAGTGTAAAGGCTCAG
AACCAGAAGCTGCTGGACTTCCTGTGCAGGCAGCAGTGCATGGAGGAGCTGGTGAGCCTC
ATCACACAGGATCCGCCCTGGACATGGAGGAGAAGGTCCGCTTCAAATATCCAAACACA
GCCTGTGAGCTTCTGACTTGTGATGTGCCGAGATCAGCGACCGCCTCGGTGGGACGAG
AGCCTGCTGAGCCTCCTGTACGACTTCTTGACCATGAGCCGCTCTCAATCCTCTGCTC
GCCAGTTTTTTCAGCAAGACCATTGGCAATCTCATTGCAAGAAAACCGAACAGGTGATT
ACGTTTTTGAAGAAGAAGACAAGTTCATCAGCCTGGTGTGAAGCACATCGGCACCTCA
GCGCTTATGGACCTGCTGCTGCGCCTGGTCAGCTGTGTGGAGCCAGCCGGGCTCCGGCAG
GACGTCCTGCACTGGCTGAATGAAGAGAAGGTCAATCCAGAGGCTTGTGGAGTTGATCCAC
CCGAGCCAGGATGAAGATAGGCAGTCAAATGCTTCTCAGACTCTCTGTGACATAGTTAGG
CTGGGCAGAGACCAGGGCAGTCAGCTGCAAGAGGCTCTGGAGCCAGACCCGCTCCTCACA
GCGCTGGAGTCCGAGGACTGTGTGGAGCAGCTTCTGAAGAACATGTTTGTGAGACCGG
ACGGAGAGCTGCCTCGTCAGTGGGACTCAGGTGTTACTCACCTTGTCTGAAAACAGGCGG
GTTGGGACAGAGGGCTTGGTGGACTCCTTTTCTCAGGGACTGAAAGGTCAACGCTGTC
AGCAGCAGCGTACTACACGGCATCGAGCCTCGGCTGAAGGACTTCCACCAGCTCCTGCTC
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CACGCTGCCCGTGAGGAGAGGACAGAAGCCAGCGGATCCGAGAGCAGGGTGGAGCCTCCG
CATGAGAACGGAAACCGGAGCCTGGAGACTCCCCAGCCGGCCGCCAGCCTCCCTGACAAC
ACAATGGTGACCCACCTGTTCCAGAAGTGTGCCTGGTGCAGAGGATCCTGGAGGCTGG
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ACACGGATCGCCAACCGGTGGTGCAGAACCTGGAGCGGGGCCCTGTGCAGACGCACATC

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AGCGAGGTCATCCGAGGGCTCCCTGCGGACTGCCGTGGCCGCTGGGAGAGCTTCGTGGAG
 GAGACGCTGACGGAGACGAACCGCAGGAACACTGTGGACCTGGCCTTCTCTGACTACCAG
 ATCCAGCAGATGACAGCCAACCTTCGTGGATCAGTTTGGCTTCAATGATGAGGAGTTTGCC
 GACCAGGACGACAACATCAATGCCCCGTTTGACAGGATCGCAGAGATCAACTTCAACATC
 GACGCTGACGAGGACAGTCCCAGCGCAGCTCTGTTTGGGCTGCTGCAGTGACCCGATC
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 ACAGCAGCCCCAGCCATGGTGGCCACCTGGGGACAGTGACAAAGGACGGGAAGACAGAT
 GCCCCGCCAGAAGGAGCTGCCTTAAATGGCCAGTGTGA

Clone variation with respect to NM_014678.4
 973 a=>n;974 a=>n;975 g=>n;976 a=>n;977 a=>n;2022 g=>c;2114 g=>a

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_014678 unedited
 GTGTCANGATATGNATACGACTCACTATAGGGCGGCCGCGAATCGGCACGAGGAGCGATC
 GGAGTGCCGCCCGCGGCCCGAGTCGGTCTCGAGCCCGGCCGCGCCGTGCCGGTCCG
 TAGGCGTGCGCCCTCGGCCGGGCCATGTGTGTGCGGCCCGCCGAGGCCCGCCGGGCT
 TTGCCTCCACCAGCGCCCTGGCCTCCGCTCGGGCCTCCACACGGGCCTCCGAAGAGCTGC
 CCGCAGCCCCGGCCCGCAGGGCAGGTAAGAGATTATAAATCTTCCACTGAATGAAAAAA
 ATTTTCTAAAGCTGCATATACTCCAAGAAAAAAACCACAAATGTTTTTCTGTTTTGCT
 GAATACATGATTTAAACAAGAGATTTCCACAGAAGCTCTGCGGCCGTACGATGTTCTGG
 AAGTTTGACTTGAACACCACGTCCCATGTTGACAAGCTGCTGGACAAGGAGCATGTGACG
 CTGCAGGAGTTAATGGATGAAGATGACATCTTGCAGGAGTGAAGGCTCAGAACCAGAAG
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 GATCCGCCCTGGACATGGAGGAGAAGGTCGGCTTCAAATATCCAAACACAGCCTGTGAG
 CTCTGACTTGTGATGTGCCGAGATCAGCGACCGCCTCGGTGGGACGAGAGCCTGCTG
 AGCCTCCTGTACGACTTCTTGGACCATGAGCCGCTCTCAATCCTCTGCTCGCCAGTTTT
 TTCAGCAAGACATTGGCAATCTCATTGCAAGAAACACCGAACAGGTGATTACGTTTTTG
 AAGAAGAGGACAAGTTCATCAGCCTGGTGTGAAGCACATCGGCACCTCAGCGCTTATGG
 ACCTGCTGCTGCGCCTGGTCAGCTGTGG

3' Read Nucleotide Sequence: >OriGene 3' read for NM_014678 unedited
 NGCATCCATAGGGTTTAAAACCAAATTCATNAATTAATAAAAAACCCATGCATCACCAGGT
 AGTTTTCTCGATTAAGGAGGCAGCCTGACCAGGGTGGGCCGTGGCCGGGCGGCAGCAGCA
 TCACACTGGGCCATTTAAGGCAGCTCCTTCTGGCGGGGCATCTGTCTTCCCGTCTTTGT
 CACTGTCCCAGGGTGGCCACCATGGCTGGGGCTGCTGTGACTGCCATGATGGGCCCTAG
 GGGGACCGCCACGGCCAGTGCACAAGAGACTGCTGGGGTGGGTATGGCGGGCCAGCCTT
 GCTCAGTGTGTGGTGATGGCCACAGTAGCCTCGGGGGGCACAGCCACGGCTGGGGCAGC
 AGTCACCTTCTTTGGCGGGGGCAGGCAGGGCTTAACAGCCGGCTGTAGCACACCCGAC
 CCTGCCGACAGCCTCCTCTGTCTGGCCACTGTGGGCAGCGGGGGGCTCCCGCCGGG
 ACCCTGTCTACCGCATCCATGGCACTCGCTGCCTTCTGGTCGCCATCCTCGCTGTGGGA
 GCCCCACAGGAGCTCCTGTCCGAGGCCGCACGGGGCCTTCTGGTGACACACAGTT
 CCAGGCCCATGGTGTAGCCGGGCTGAAGCTTTCTCATGGCCTTGGCTCCCGGCTGCCCC
 TCAGCTTGGCCGCTTCTGTGGCCCCGGGGAGCTGCCCTGGGCCCTGTCTCGGGGCCG
 CTGCAAGTTGGAAGTTACTGAACCTTTGGCCCCACCTTTCCCTCTGGCGCTGGGGGGC
 CCCTGNCCACACCCGGGAACGCCGTTCTCCCTCCTTGGGGCTGTGGCCGTTCTGT
 CCCTCGTGCTTTTAAACATTGTGCCCCCTGGCGCCTTTTACTCCTCCCTCCGGCGG
 GGGCTTCTTTCATCCAGAGACAAG

Restriction Sites: NotI-NotI

ACCN: NM_014678

Insert Size: 3850 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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_014678.3](#), [NP_055493.2](#)

RefSeq Size: 4004 bp

RefSeq ORF: 2799 bp

Locus ID: 9701

UniProt ID: [O75170](#)

Cytogenetics: 22q13.33

Domains: SAPS

Gene Summary: The protein encoded by this gene is a regulatory protein for the protein phosphatase-6 catalytic subunit. Together, these proteins act as a significant T-loop phosphatase for Aurora A, an essential mitotic kinase. Loss of function of either the regulatory or catalytic subunit of protein phosphatase-6 interferes with spindle formation and chromosome alignment. [provided by RefSeq, May 2017]

Transcript Variant: This variant (3) lacks an exon in the coding region but maintains the reading frame, compared to variant 1. The encoded isoform (3) is shorter than isoform 1.

Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.