

## Product datasheet for **SC109278**

### GPS2 (NM\_004489) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GPS2 (NM_004489) Human Untagged Clone
Tag:	Tag Free
Symbol:	GPS2
Synonyms:	AMF-1
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC109278 sequence for NM_004489 edited (data generated by NextGen Sequencing)

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ATGCCCGCACTCCTGGAGCGCCCAAGCTTTCCAACGCCATGGCCAGGGCGCTGCACCGG
CACATTATGATGGAGCGGAGCGCAAGCGGCAGGAGGAAGAAGAGGTGGATAAAGATGATG
GAACAGAAGATGAAGGAAGAACAGGAGAGAAGGAAGAAAAAGGAGATGGAAGAGAGAATG
TCATTAGAGGAGACCAAGGAACAAATTCTGAAGTTGGAGGAGAAGCTTTTGGCTCTACAG
GAAGAGAAGCACCAGCTTTTCTGCAGCTCAAGAAAGTTTACATGAGGAAGAAAAACGG
AGGCGAAAGGAACAGAGTGACCTGACCACCCTGACATCAGCTGCATACCAGCAGAGCCTG
ACTGTTACACAGGAACATCTCCTCAGCATGCAGGGGAGCCCTGGAGGACACAATCGC
CCAGGCACCCTCATGGCAGCTGACAGAGCCAAACAAATGTTTGGACCCCAAGTGCTTACG
ACCCGGCACTACGTGGGCTCAGCAGCTGCTTTTGCAGGGACACCAGCATGGACAATTC
CAAGGCAGTCCTGGTGGTGCCTATGGGACTGCTCAGCCCCACCTCACTATGGGCCACACA
CAGCCAGCTTATAGTCCTAGTCAGCAGCTCAGAGCTCCTTCGGCATTCCCTGCAGTGCAAG
TACCTATCTCAGCCACAGCCACAGCCCTATGCTGTGCATGGCCACTTTCAGCCCACTCAG
ACAGGTTTCTCCAGCCTGGTGGTGCCTGTGCTTGCAAAAGCAGATGGAACATGCTAAC
CAGCAGACTGGCTTCTCCGACTCATCCTCTGCGCCCCATGCACCCCAAGGCTCTGCAT
CCAGCCCTGGACTCCTTGCTTCCCCCAGCTCCCTGTGCAGATGCAGCCAGCAGGAAAG
TCGGGCTTTGCAGCTACCAGCCAACCTGGCCCTCGGCTCCCCTTCATCCAACACAGCCAG
AACCCGGATTCTACCACAAGTGA

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Clone variation with respect to NM\_004489.4  
333 a=>g



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<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_004489 unedited          NGGGTCGAATTTGTATACGACTCATATNAGGCGGCCGCGCTCGGNACCGCTGAGAAGCG          CANAGAAGCGGGCCCGTCTGAGGTCTGGCAGTCAGAGACAGCCGGGCGCCACGGCCCG          AGCGCCACGGCAGCACCATGCCCGCACTCCTGGAGCGCCCAAGCTTTCCAACGCCATG          GCCAGGGCGCTGCACCGGCACATTATGATGGAGCGGGAGCGCAAGCGGCAGGAGGAAGAA          GAGGTGGATAAAGATGATGGAACAGAAGATGAAGGAAGAACAGGAGAGAAGGAAGAAAAAG          GAGATGGAAAGAGAGAATGTCATTAGAGGAGACCAAGGAACAAATCTGAAGTTGGAGGAG          AAGCTTTTGGCTCTACAGGAAGAGAAGCACCAGCTTTTCTGCAGCTCAAGAAAGTTTTA          CATGAGGAAGAAAAACGGAGGCGAAAGGAACAGAGTGACCTGACCACCCTGACATCAGCT          GCATACCAGCAGAGCCTGACTGTTACACAGGAACTCATCTCCTCAGCATGCAGGGGAGC          CCTGGAGGACACAATCGCCAGGCACCCTCATGGCAGCTGACAGAGCCAAACAAATGTTT          GGACCCCAAGTGCTTACGACCCGGCACTACGTGGGCTCAGCAGCTGCTTTTGCAGGGACA          CCAGAGCATGGACAATCCAAGGCAGTCTGGTGGTGCCTATGGGACTGCTCAGCCCCAC          CTCACTATGGGCCACACAGNACAGCTATAGTCTAGTCAGCAGCTCAGAGCTCCTTCGG          CATTCCCTGCAGTGCAGTACCTATCTCAGCCACACCACAGCCCTATGCTGTGCATGGGCA          CTTTCAGCCACTCAAACAGGNTTCTCCAGNCTGGTGGGCCCCTGTCCCTGCAAAAGCAG          ATGGN</p>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_004489 unedited          TCGGGGTGCTATTTTCATTGGCTCTGGGNACACACAGGGGNATACCCTCACCCACGAGGG          GTGGGGGTGTGGTGTGAAGATATAATCTGATGGTCACTTGTGGTAGAATCGCGGGTTC          TGGCTGTGTTGGATGAAGGGGAGCCGAGGGCCAGGTTGGCTGGTAGCTGCAAAGCCCGAC          TTTCTGTCTGGCTGCATCTGCACAGGGAGCTGGGGGAAGCAAGGAGTCCAGGGGCTGGA          TGCAAGAGCTGGGGTGCATGGGGCGCAGAGAGGATGAGTCGGAGAAGCCAGTCTGCTGG          TTAGCATGTTCCATCTGCTTTTGAAGGACAGGGCACCACCAGGCTGGAGGAAACCTGTC          TGAGTGGGCTGAAAGTGGCCATGCACAGCATAGGGCTGTGGCTGTGGCTGAGATAGGTAC          TGCACTGCAGGGAATGCCGAAGGAGCTCTGAGCTGCTGACTAGGACTATAAGCTGGCTGT          GTGGGCCCATAGTGAGGTGGGGGCTGAGCAGTCCCATAGGCACCACCAGGACTGCCTTGG          AATTGTCCATGCTCTGGTGTCCCTGCAAAAGCAGCTGCTGAGCCACGTAGTGCCGGGTC          GTAAGCACTTGGGGTCCAAACATTTGTTGGCTCTGTGAGTCCCATGAGGGTGCCTGGG          CGATTGTCTCCTCAGGGCTCCCTGCATGCTGAGGAGATGAGTTCCTGTGTGAACAGTC          AGGCTCTGGTATGCAGCTGATGTGAGGGTGGTCANGTCACTCTGTTCTTTTCCGCTT          CGTTTTCTCCTCATGTAAAACTTTCTTGAGTGCAGGAAAACTGGTGCTTCTCTTCC          TGTAAAGCCAAAAGCTNCTCTCCACCTCCAGAAATTGTCCTGGTCTCCTCTATGACATT          CTCTTCTCCATCCCCCTTNTTNCCTCCTCTCCGGNCTTCTNCATACTTTGTNCCATC          ATCTTATCCACCTTTNCTTCTCCTGCCGGTTGCGCTCG</p>
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_004489
<b>Insert Size:</b>	1300 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).

**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\\_004489.4](#), [NP\\_004480.1](#)

**RefSeq Size:** 1181 bp

**RefSeq ORF:** 984 bp

**Locus ID:** 2874

**UniProt ID:** [Q13227](#)

**Cytogenetics:** 17p13.1

**Domains:** NEUZ

**Protein Families:** Druggable Genome

**Gene Summary:** This gene encodes a protein involved in G protein-mitogen-activated protein kinase (MAPK) signaling cascades. When overexpressed in mammalian cells, this gene could potentially suppress a RAS- and MAPK-mediated signal and interfere with JNK activity, suggesting that the function of this gene may be signal repression. The encoded protein is an integral subunit of the NCOR1-HDAC3 (nuclear receptor corepressor 1-histone deacetylase 3) complex, and it was shown that the complex inhibits JNK activation through this subunit and thus could potentially provide an alternative mechanism for hormone-mediated antagonism of AP1 (activator protein 1) function. [provided by RefSeq, Jul 2008]  
Transcript Variant: This variant (2) shares several exons with variant 1 and encodes G protein pathway suppressor 2, a distinct downstream protein. Variants 2 and 3 differ in their 5' UTR and specify the same protein.