

## Product datasheet for **SC117699**

### WAVE 1 (WASF1) (NM\_003931) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	WAVE 1 (WASF1) (NM_003931) Human Untagged Clone
Tag:	Tag Free
Symbol:	WAVE 1
Synonyms:	NEDALVS; SCAR1; WAVE; WAVE1
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >OriGene ORF within SC117699 sequence for NM\_003931 edited (data generated by NextGen Sequencing)

```

ATGCCGCTAGTAAAAAGAAACATCGATCCTAGGCACTTGTGCCACACAGCACTGCCTAGA
GGCATTAAAGATGAACTGGAATGTGAACCAATATTTCCCTGGCAAAATAAATTAGACAA
CTAAGTAGCCTAAGTAAATATGCTGAAGATATATTTGGAGAATTATTCATGAAGCACAT
AGTTTTTCCCTTCAGAGTCAACTCATTGCAAGAACGTGTGGACCGTTTATCTGTTAGTGTT
ACACAGCTTGATCCAAAGGAAGAAGAATTGTCTTTGCAAGATATAACAATGAGGAAAGCT
TTCCGAAGTTCTACAATTCAAGACCAGCAGCTTTTCGATCGCAAGACTTTGCCTATTCCA
TTACAGGAGACGTACGATGTTTGTGAACAGCCTCCACCTCTCAATATACTCACTCCTTAT
AGAGATGATGGTAAAGAAGGTCTGAAGTTTTATACCAATCCTTCGTATTTCTTTGATCTA
TGGAAAGAAAAATGTTGCAAGATACAGAGGATAAGAGGAAGGAAAAGAGGAAGCAGAAG
CAGAAAAATCTAGATCGTCCTCATGAACCAGAAAAAGTGCCAAGAGCACCTCATGACAGG
CGGCGAGAATGGCAGAAGCTGGCCCAAGGTCCAGAGCTGGCTGAAGATGATGCTAATCTC
TTACATAAGCATATTGAAGTTGCTAATGGCCAGCCTCTCATTGAAACAAGACCTCAG
ACATACGTGGATCATATGGATGGATCTTACTCACTTTCTGCCTTGCCATTTAGTCAGATG
AGTGAGCTTCTGACTAGAGCTGAGGAAAGGGTATTAGTCAGACCACATGAACCACCTCCA
CCTCCACCAATGCATGGAGCAGGAGATGCAAAACCGATACCCACCTGTATCAGTTCTGCT
ACAGGTTTGATAGAAAATCGCCCTCAGTACCAGCTACAGGCAGAACACCTGTGTTTGTG
AGCCCCACTCCCCACCTCCTCCACCACCTCTTCCATCTGCCTTGTCAACTTCTCCTATTA
AGAGCTTCAATGACTTCAACTCCTCCCCCTCCAGTACCTCCCCACCTCCACCTCCAGCC
ACTGCTTTGCAAGCTCCAGCAGTACCACCACCTCCAGCTCCTCTTCAGATTGCCCTGGA
GTTCTTACCAGCTCCTCCTCAATTGCACCTCCTCTAGTACAGCCCTCTCCACCAGTA
GCTAGAGCTGCCCAGTATGTGAGACTGTACCAGTTCATCCACTCCCAAGTGAAGTGAAGT
CAGGGGCTGCCTCCACCCACCACCGCTCCTCTGCCTCCACCTGGCATTTCGACCATCA
TCACCTGTCACAGTTACAGCTCTTGCTCATCCTCCCTCTGGGCTACATCCAACCTCATCT
ACTGCCCCAGGTCCCATGTTCCATTAATGCCTCCATCTCCTCCATCACAAGTTATACCT
GCTTCTGAGCCAAAGCGCCATCCATCAACCCTACCTGTAATCAGTGATGCCAGGAGTGTG
CTACTGGAAGCAATACGAAAAGGTATTCAGCTACGCAAAGTAGAAGAGCAGCGTGAACAG
GAAGCTAAGCATGAACGCATTGAAAACGATGTTGCCACCATCCTGTCTCGCCGATTGCT
GTTGAATATAGTGATTCCGAAGATGATTCAGAATTTGATGAAGTAGATTGGTTGGAGTAA
    
```

Clone variation with respect to NM\_003931.2

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_003931 unedited

```

NNGGTCGTTTTTGTATACGACTCCTATAGGCGGCCGNATTCGGCAGGAGGCTAGCTTC
GGTACTCTGACACCTTCTCTTGCACTTGCAGATGATGAACTGGAATAACGATGAAAGAAA
GCACATCCGATCTCAACATTCACGTCTGCCCTATAACCGATTAATTAATTGATCCCCAG
CTAGACTAGTGTTGGAGAAATCAGCATGTTAAAACAACCTGTTGATGATAGCTGTTGGAGT
AAAGTTGCAAGTGAAGCTATGGCTGCAAAATCGTTAAAATCTTCAAGGTGAACTGGCACA
AAGGTTAATCTCAAGATGCCGCTAGTAAAAAGAAACATCGATCCTAGGCACTTGTGCCAC
ACAGCACTGCCTAGAGGCATTAAGAATGAACTGGAATGTGAACCAATATTTCCCTGGCA
AATATAATTAGACAACTAAGTAGCCTAAGTAAATATGCTGAAGATATATTTGGAGAATTA
TTCAATGAAGCACATAGTTTTTCCCTTCAGAGTCAACTCATTGCAAGAACGTGTGGACCGT
TTATCTGTTAGTGTTACACAGCTTGATCCAAAGGAAGAAGAATTGCTTTGCAAGATATA
ACAATGAGGAAAGCTTTCCGAAGTTCTACAATTCAAGACCAGCAGCTTTTCGATCGCAAG
ACTTTGCCTATTCCATTACAGGAGACGTACGATGTTTGTGAACAGCCTCCACCTCTCAAT
ATACTCACTCCTTATAGAGATGATGGTAANAGAAGGTTCTGAAGTTNTATACCAATCCTT
CGTATTTCTTTGATCTATGGAAGAANNAATGTTGCAAGATACAGNAGGATAGAGGAAGG
NAAAGAGGAAGCAGAAGCAGAAAATTCTAGATCGTCCTCATGAACCAGNANAAGTGCCAG
AGCACCTC
    
```

<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_003931 unedited TGGACCGCGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTAACTTTTAAAA TGAACCATTTATTAATCAGACTGTTATTCTTAACAGTTATGTAAGTTACATGTATGTTT AAGTCAGAGTATTTACATGGAAAAGTTTTAACTCCTATAGGCAAGCAAAATCATATCA CACAATATATAAGTGGGAAGGGGATACTGCTAACATTCAAATAAGGCAAGTATATAAAA ACAATAAAACAATAATGAAAAAATCAAGCATTCTTTAAGAGAATTCAACACTACAAGC TAAATGTACTTTCTGAGTGTATTTCGTATAATCAAGGCAGTGTTCCTTTTAAACATC AGGAAATGGAATAAGGCTCATTAGTAGATACAGCTGCCCTCAAGATTTCAATTTAGTTG CTTTCTTTAAATTAATAATCACAAAGTACACAATTAAGATATATCAAAAACTGAATCTG CTACTCTAACACAGCTGTCATGCTTAATACTTAGTGGTTTTATTGACCAAATTAGTCT TTTCAGGGGGAAAAAAGATAAGCCACTGTAAACATTGAGTTTGAATGTATGTAATA TTTTCTTAAAAATCAAAAGTTATGGAGGAAAAGGTCATTTATTATAAGGAAAAGAAAG CCAAACTATAATGACCAACATTTTCCAGGAACAAGCACCCCAAGGACATTTGCATT CACCTTTGCAATATTATCAATGCCTTTTTCTTACTCCACCAATCTACTTCATCAAATTC GAAACCTCTCCGAAATACTATTTTCAACAGCTATACCGGTGAAACCAGGATGGTGGCCA CCATCGTCTCAAAGGCCTCCATGCCTTACCTTCTGTTACCCCTCGTTTTTTTATTTTG
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_003931
<b>Insert Size:</b>	2620 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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_003931.2</a> , <a href="#">NP_003922.1</a>
<b>RefSeq Size:</b>	3230 bp
<b>RefSeq ORF:</b>	1680 bp
<b>Locus ID:</b>	8936
<b>UniProt ID:</b>	<a href="#">Q92558</a>
<b>Cytogenetics:</b>	6q21
<b>Domains:</b>	WH2
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Adherens junction, Fc gamma R-mediated phagocytosis, Regulation of actin cytoskeleton

**Gene Summary:**

The protein encoded by this gene, a member of the Wiskott-Aldrich syndrome protein (WASP)-family, plays a critical role downstream of Rac, a Rho-family small GTPase, in regulating the actin cytoskeleton required for membrane ruffling. It has been shown to associate with an actin nucleation core Arp2/3 complex while enhancing actin polymerization in vitro. Wiskott-Aldrich syndrome is a disease of the immune system, likely due to defects in regulation of actin cytoskeleton. Multiple alternatively spliced transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008]  
Transcript Variant: This variant (1) represents the longest transcript.