

## Product datasheet for **MG226199**

### Smurf1 (NM\_001038627) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Smurf1 (NM_001038627) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Smurf1
Synonyms:	4930431E10Rik; mKIAA1625
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide  
Sequence:

>MG226199 representing NM\_001038627  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGTCGAACCCCGGACCCGTAGGAACGGCTCCAGCATCAAGATCCGTCTGACAGTATTGTGTGCCAAGA  
ACCTTGCAAAGAAAGACTTCTTCAGACTCCCCGACCCCTTGCCAAGATTGTTGTGGACGGCTCTGGGCA  
GTGCCACTCAACCGACTGTGAAAAACACCCTGGACCCAAAGTGGAACCAAGCACTATGACCTGTATGTT  
GGGAAAACGGACTCGATAACCATCAGTGTGTGGAACCAAGAAGATCCACAAGAAGCAGGGGGCTGGCT  
TCCTGGGCTGTGTGCGGCTGCTCTCCAATGCCATCAGCAGATTGAAAGACTGGCTACCAGCGTTTGG  
TCTATGCAAACAAATCCCTCAGATACTGATGCAGTTCGTGGCCAAATAGTGGTCAGTTTACAGACCCGA  
GACAGAATAGGCGGTGGAGGGTCAGTGGTGGACTGCAGAGGGCTGCTGGAGAACGAAGGAACAGTGTATG  
AAGACTCAGGCCCTGGAAGGCCGCTCAGCTGCCTCATGGAGGAACCTGCCCATATACAGATGGTACTGG  
TGCAGCAGCAGGAGGCGGGAACGCAGGTTTGTGGAGTCTCAAGCCAAGATCAGAGACTCCTGGTACAG  
CGACTCCGAAATCCTGAGGTTTCGAGGGCCCTTACAGACACCCAGAACCACCACATGGCCACCAGTCGC  
CAGAGCTGCCTGAAGGCTATGAGCAAAGGACAACAGTGCAGGGACAAGTTTACTTTTTGCACACGCAGAC  
TGGAGTCAGTACATGGCATGACCCAGGATCCCCAGAGACCTTAACAGTGTGAACTGCGATGAACTTGGG  
CCACTGCCTCCAGGCTGGGAAGTCCGAAGCACAGTGTGCGGAAGAATCTATTTTGTAGATCAACAATA  
GGACAACCCAGTTTACAGATCCACGGCTTACCACATCATGAATCACCAGTGCCAACTCAAGGAGCCAG  
CCAGCCGCTGCAGCTGCCAGTGAAGGCTCCGTGGAGGACGAGGAGCTTCTGCCAGAGATATGAGAGG  
GACTTAGTCCAGAAGCTCAAAGTCTCAGGCACGAGCTCTCTTTCAGCAGCCCCAGGCTGGTCACTGTC  
GAATAGAAGTCTCCAGAGAAGAGATATTTGAGGAGTCTGATCGCCAGATCATGAAGATGCGGCCAAAAGA  
CCTAAAGAAGCGCCTGATGGTGAAGTTCGAGGGGAGGAAGTTTGGACTATGGTGGAGTGGCTCGGGAG  
TGGCTGTATTTGTGTGCCATGAAATGTTGAACCCGTAATGACTCTTCCAGTATTCCACGGACAATA  
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TCGCATCATGGTCTGGCTGTGTTCCACGGACTACATAAATGGGGTTTACAGTTCGGTCTACAAG  
CAGCTCCTGGGAAGCCAATCCAGCTGTCGACCTGGAGTCCGTGGACCCAGAAGTGCATAAGAGCTTGG  
TGTGGATTCTAGAGAATGACATCAGCCTGTGTTGGATCATACTTCTGCGTGGAGCACAACGCTTTCGG  
GCGGATTCTCCAGCATGAACTGAAACCCAATGGCAGAAATGTGCCTGTCAGTGGAGACAAGAAGGAA  
TACGTCGGCTGTATGTGAAGTGGAGTTTATGAGAGGAATCGAAGCCAGTTCTTAGCACTTCAGAAGG  
GGTTTAAAGCAACTCATTCCCAACACTTGTGTAAGCCCTTTGACCAGAAGGAACTAGAGCTGATAATAGG  
TGGGCTGGATAAGATAGACCTGAACGACTGGAAGTCCAACACCCGGCTGAAACACTGTGTGGCAGACAGC  
AACATCGTCAGGTGGTCTGGCAGGCGGTGGAGACCTTCGATGAGGAGAGGAGAGCCAGACTCCTGCAGT  
TTGTGACAGGATCCACAAGAGTTCCTCTCAAGGCTTCAAGGCTCTGCAAGGCTCTACAGGCGCGGAGG  
GCCCGGCTGTTACCAATCACCTGATAGACGCCAATACAGACAACCTGCCAAGGCCATACCTGCTTT  
AATCGGATCGACATCCCACCCTATGAGTCCTATGAGAAGCTCTATGAGAAGCTGCTGACAGCGGTGGAGG  
AAACCTGTGGCTTTCAGTGGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG226199 representing NM\_001038627  
 Red=Cloning site Green=Tags(s)

```

MSNPGTRRNGSSIKIRLTVLCAKNLAKKDFRLLPDPFAKIVVDGSGQCHSTDTVKNTLDPKWNQHYDLYV
GKTDSITISVWNHKKIHKKQAGFLGCVRLLSNAISRKDTGYQRLDLCKLNPSDTDAVRGQIVVSLQTR
DRIGGGGSVVDRCGLLENEGTVYEDSGPGRPLSCLMEEPAPYTDGTGAAAGGGNCRFVESPSQDQRLLVQ
RLRNPEVRGRLQTPQNRPHGHQSPLEPEGYEQRRTTVQGQVYFLHTQTGVSTWHDPRIPRDLNSVNCDELG
PLPPGWEVRSTVSGRIYFVDHNNRRTQFTDPRLHHIMNHQCQLKEPSQPLQLPSEGSVEDEELPAQRYSR
DLVQKLKVLRLHSLQPPQAGHCRIEVSREEIFEEYSYRQIMKMRPKDLKRLMVKFRGEEGLDYGGVARE
WLYLLCHEMLNPYYGLFQYSTDNIYTLQINPDSSINPDHLSYHFVGRIMGLAVFHGHYINGGFTVPFYK
QLLGKPIQLSDLESVDPELHKSLVWILENDITPVL DHTFCVEHNAFGRILQHELKPNGRNVPVTEENKKE
YVRLYVNWRFMRGIEAQFLALQKGFNELIPQHLLKPFQKELEL IIGGLDKIDLNDWKSNTRLKHCVADS
NIVRWFWQAVETFDEERRARLLQFVTGSTRVPLQGFKALQGSTGAAGPRLFTIHLIDANTDNLPKAHTCF
NRIDIPPYESYEKLYEKLLTAVEETCGFAVE
  
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**ACCN:** NM\_001038627

**ORF Size:** 2193 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\\_001038627.1](#), [NP\\_001033716.1](#)

**RefSeq Size:** 5333 bp

**RefSeq ORF:** 2196 bp

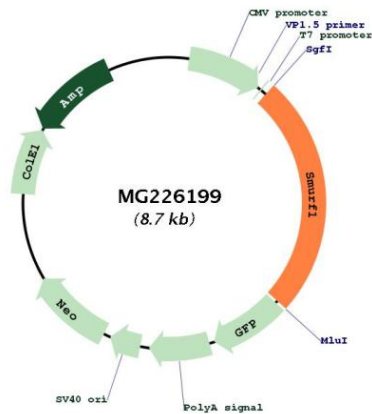
**Locus ID:** 75788

**UniProt ID:** [Q9CUN6](#)

**Cytogenetics:** 5 G2

**Gene Summary:** E3 ubiquitin-protein ligase that acts as a negative regulator of BMP signaling pathway (By similarity). Mediates ubiquitination and degradation of SMAD1 and SMAD5, 2 receptor-regulated SMADs specific for the BMP pathway (By similarity). Promotes ubiquitination and subsequent proteasomal degradation of TRAF family members and RHOA (By similarity). Promotes ubiquitination and subsequent proteasomal degradation of MAVS (PubMed:23087404). Plays a role in dendrite formation by melanocytes (By similarity). [UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MG226199