



**Protein Sequence:** >MG226590 representing NM\_001042660  
 Red=Cloning site Green=Tags(s)

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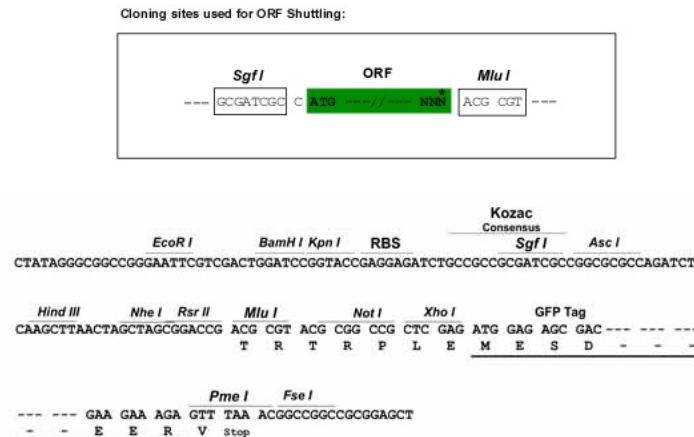
MFRTKRSALVRRLLWRSRAPGGDEEEGVGGGGGGELRGEGATDGRAYGAGGGGAGRAGCCLGKAVRGAK
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YSRYPMDFLKPTAGCPDAVPSSAETGGTNYLAPGGLSDSQLLLEPGDRSHWCVVAYWEEKTRVGRLYCVQ
EPSLDIFYDL PQNGFCLGQLNSDNKSQLVQKVRKIGCGIQLTREVDGVWVYNRSSYPFIKSATLDNP
DSRLLVHKVFPGF SIKAFDYEKAYSLQRPNDHEFMQQPWTGFTVQISFVKGWGQC YTRQFISSPCWLE
VIFNSR
  
```

TRTRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001042660

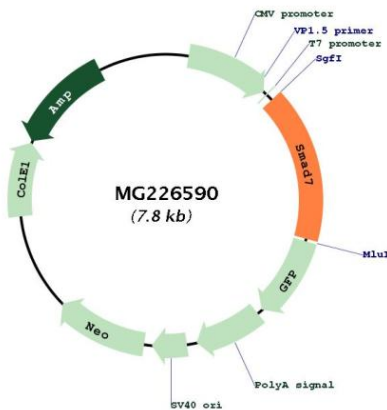
**ORF Size:** 1278 bp

**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](mailto: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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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>	<u><a href="#">NM_001042660.1</a></u> , <u><a href="#">NP_001036125.1</a></u>
<b>RefSeq Size:</b>	4441 bp
<b>RefSeq ORF:</b>	1281 bp
<b>Locus ID:</b>	17131
<b>UniProt ID:</b>	<u><a href="#">O35253</a></u>
<b>Cytogenetics:</b>	18 E3
<b>Gene Summary:</b>	Antagonist of signaling by TGF-beta (transforming growth factor) type 1 receptor superfamily members; has been shown to inhibit TGF-beta (Transforming growth factor) and activin signaling by associating with their receptors thus preventing SMAD2 access. Functions as an adapter to recruit SMURF2 to the TGF-beta receptor complex. Also acts by recruiting the PPP1R15A-PP1 complex to TGFBR1, which promotes its dephosphorylation. Positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MG226590