

## Product datasheet for **MG225159**

### Axin1 (NM\_009733) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Axin1 (NM_009733) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Axin1
Synonyms:	AI316800; Axin; Fu; fused; Kb; Ki; kinky; knobbly
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG225159 representing NM\_009733  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCAGAGTCCAAAATGAATGTCCAGGAGCAGGGTTTCCCTTGGACCTCGGAGCAAGTTTACCCGAAG  
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**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG225159 representing NM\_009733  
 Red=Cloning site Green=Tags(s)

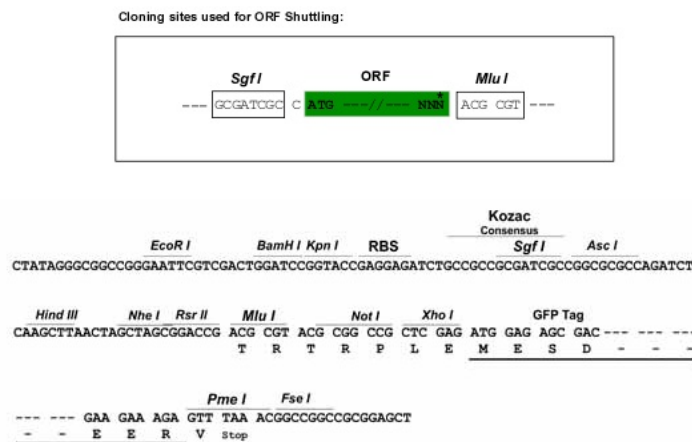
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 ETKSQRKAGGGSAPP CDSIVVAYYFCGEP I PYRTLVRGRAVTLGQFKELLTKKGSYRYFFKKVSD EFDG  
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TRTRPLE - GFP Tag - V

**Restriction Sites:**

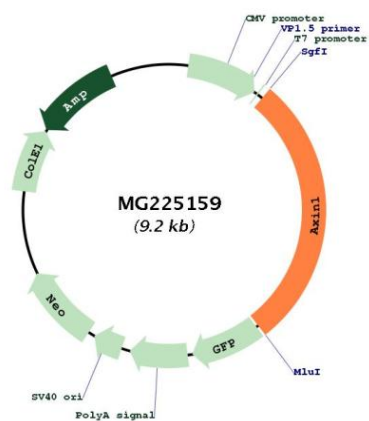
SgfI-MluI

**Cloning Scheme:**



ACCN:	NM_009733
ORF Size:	2604 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. <a href="#">More info</a>
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:	<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>
RefSeq:	<a href="#">NM_009733.2</a> , <a href="#">NP_033863.2</a>
RefSeq Size:	3809 bp
RefSeq ORF:	2607 bp
Locus ID:	12005
UniProt ID:	<a href="#">O35625</a>
Cytogenetics:	17 13.07 cM
Gene Summary:	Component of the beta-catenin destruction complex required for regulating CTNNB1 levels through phosphorylation and ubiquitination, and modulating Wnt-signaling (By similarity). Controls dorsoventral patterning via two opposing effects; down-regulates CTNNB1 to inhibit the Wnt signaling pathway and ventralize embryos, but also dorsalizes embryos by activating a Wnt-independent JNK signaling pathway. In Wnt signaling, probably facilitates the phosphorylation of CTNNB1 and APC by GSK3B. Likely to function as a tumor suppressor. Facilitates the phosphorylation of TP53 by HIPK2 upon ultraviolet irradiation. Enhances TGF-beta signaling by recruiting the RNF111 E3 ubiquitin ligase and promoting the degradation of inhibitory SMAD7 (By similarity). Also component of the AXIN1-HIPK2-TP53 complex which controls cell growth, apoptosis and development.[UniProtKB/Swiss-Prot Function]

## Product images:



Circular map for MG225159