

## Product datasheet for **RN205458**

### Axin1 (NM\_024405) Rat Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Axin1 (NM_024405) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Axin1
Synonyms:	Axin; axin-1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**Fully Sequenced ORF:** >RN205458 representing NM\_024405  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCAGAGTCCAAAATGAATGTCCAGGAGCAGGGTTTCCCTTGGACCTCGGAGCAAGTTTACCCGAAG  
 ATGCCCCCGGCCCCAGTGCCTGGAGAAGAGGGAGAAGTGGTATCCACTGATTCGAGGCCGTGCAACCA  
 CAGTTTCTGCTCTGGAAAGGTACCAGCATTAAAAGTGAGACCTCAACAGCCACCCCAAGACGTTAGAT  
 CTGGATCTGGGATATGAGCCTGAGGGCAGTGCCTCCCCACCCACCATACTTGAGGTGGGCTGAGTCAC  
 TGCATTCTTACTGGATGACCAAGATGGGATCAGCCTGTTGAGGACTTTCCTGAAGCAGGAGGGCTGTGC  
 TGACCTGCTGGACTTCTGGTTTGCCTGCAGTGGCTTCAGAAAGCTTGAGCCTTGACTCAAATGAGGAA  
 AAGAGGCTGAAGCTGGCAAGAGCCATCTACCGAAAGTACATCCTGGATAGCAATGGCATTGTGTCCAGAC  
 AAACCAAGCCAGCCACTAAGAGCTTCATAAAGGACTGCGTCATGAAGCAGCAGATCGATCCTGCCATGTT  
 TGACCAGGCACAGACAGAAATCCAGTCCACCATGGAGGAGAACACCTACCCTTCTTCTTAAGTCTGAC  
 ATTTATTTGGAGTACACAAGGACAGGCTCAGAAAGTCAAAGGCTGCAGTGACCAGAGCTCAGGGTCCG  
 GGACAGGGAAGGGCATGTCTGGATACTTGCCCACTTTGAATGAAGATGAAGAATGAAATGTGACCAAGA  
 TGCAGATGAGGATGATGGCCGAGACTCTGTCCCCCAGCAGGCTCACCCAGAAGCTGCTATTGGAGACT  
 GCTGCCCCGAGGGCCCCCTCAAGTAGACGGTACAACGAAGGCAGAGAGCTCAGGTATGGATCTTGGAGGG  
 AGCCTGTCAACCCTACTATGTCAACTCTGGCTATGCCCTGGCCCCAGCCACCAGTGCCAATGACAGTGA  
 GCAGCAGAGCCTGTCCAGTGTGCTGACTCTATCCCTCACGGACAGTAGCGTGGATGGAATCCCCCA  
 TACAGGATCCGTAAAGCAGCACCGAAGGGAGATGCAGGAGAGTGTCCAAGTCAATGGGCGGGTACCTCTAC  
 CTCACATTTCTCGCACTTACCGAATGCCAAAGGAGATCCGGGTAGACCACAGAAATTTGCTGAAGAGCT  
 TATTCACCGTCTAGAGGCTGTCCAGCGTACTCGAGAGGCTGAAGAAAAGTTGGAGGAACGGCTGAAGCGT  
 GTACGCATGGAGGAAGAAGGGGAAGATGGGAAAATGCCTTCTGGCCCATGGCAAGTACAAAGTGCCTT  
 CTGTCCCAGCTTGGCACCATTTCCACCTCGCTATGTGGATATGGGCTGCTCCGGACTGCGGGATGCCCA  
 TGAGGAGAATCCTGAGAGCATCCTGGATGAGCATGTGCAAGGGTATGAGGACACCTGGCTGCCAGTCA  
 CCTGGCCAGGCCACCGCTCTCCTGACAGCGGGCATGTGGCAAGACTGCAGTGTAGGGGGTACAGCAT  
 CTGGGCATGGGAAGCATGCTCCTAAGTTAGGGTTGAAGCTGGATTGAGTGGCTGCACCACCATAGGCA  
 CGTCCACCACCAGTTCACCATAATTGAGTACAGCCAAAGGAGCAAATGGAGGCTGAAGCTGCCCGCAGG  
 GTCAGAGCAGCTTCTCATGGGGCCAGAAACACATGGTTCATGCCAAGCCCCGAAGCTATTCAGAGAGCA  
 CAGGCACCAACCCAGTGTGGGACTTGGCCTTTGGTGGTAAAGCTAGTGCACCCTCCAAAAGAAACAC  
 CAAGAAGGCTGAATCTGGGAAGAATGCCAGTGTGAGGTACCCAGTACCACAGAGGATGCAGAGAAGAAC  
 CAGAAGATCATGCAGTGGATCATTGAGGGGGAGAAGGAGATCAGTAGACACCCGGAAGGCAGGCCATGGGT  
 CTTCTGGGATGAGGAAGCAGCAGGCCATGAAAGCTCCAGGCCCTTGCCATTGAAGCTCCTGGGCGGT  
 GCACCCCTGGGTGAGTGTGCTCAGCTTCCGAACTCTGTCCAGCCTTCTCATCTTTCATCCAAGATCCCACA  
 ATGCCACCCAATCCAGCCCCTAATCCTCTGACCCAGCTGGAAGAGGCCCGCAGGCGTTTGGAGGAAGAAG  
 AAAAGAGAGCAAACAACTGCCCTCAAAGCAGAGGACAAAATCACAAAGAAAGGCAGGTGGCGGGAGTGC  
 ACCACCATGTGACAGTATCGTTGTGGCCTACTATTTCTGTGGTGAACCAATACCCTACCGGACCCCTGGTG  
 AGGGGCGGTGCTGTACCCTGGGCCAGTTCAAGGAGCTGCTAACCAAGAAGGGGAGCTACAGATACTACT  
 TTAAGAAAGTGAAGTACAGGATTTGACTGTGGTGGTATTTGAGGAAGTACGGGAAGATGAGCCATCCT  
 GCCTGTCTTTGAAGAAAAGATCATCGGCAAGGTGGAAAAGGTGGACTGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_024405  
**Insert Size:** 2499 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_024405.1</a> , <a href="#">NP_077381.1</a>
<b>RefSeq Size:</b>	3460 bp
<b>RefSeq ORF:</b>	2499 bp
<b>Locus ID:</b>	79257
<b>UniProt ID:</b>	<a href="#">O70239</a>
<b>Cytogenetics:</b>	10q12
<b>Gene Summary:</b>	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 beta-catenin to inhibit the Wnt signaling pathway and ventralize embryos, but also dorsalizes embryos by activating a Wnt-independent JNK signaling pathway (By similarity). Also facilitates the phosphorylation of APC by GSK3B (By similarity). Facilitates the phosphorylation of TP53 by HIPK2 upon ultraviolet irradiation (By similarity). Enhances TGF-beta signaling by recruiting the RNF111 E3 ubiquitin ligase and promoting the degradation of inhibitory SMAD7 (By similarity).[UniProtKB/Swiss-Prot Function]