

Product datasheet for **SC117255**

Axin 2 (AXIN2) (NM_004655) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Axin 2 (AXIN2) (NM_004655) Human Untagged Clone
Tag:	Tag Free
Symbol:	Axin 2
Synonyms:	AXIL; ODCRCS
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >SC117255 representing NM_004655.
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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CTCGCCGGGCGCCTGCCCCCTCTCGGGGGCAAAGGCTTTGTGACCAAGCAGACGACGAAGCATGTCCA
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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_004655 unedited</p> <pre>TGGCGGCACAGCAATTCGGCACGAGGGCCCGAGTAGCCGGNAAATAAAAATAACCCCTC AGAGCGATGGATTTGGGGCCGCCCCGGCGGCGGAGGCGCCCGCGAAGGCCCTGCTGTAA AAGAGAGGAGGTTTCAAGTACGACCCCTGCTGACTTGAGAGAGACAGAGAGACCACGCCGAT TGCTGAGAGGTTACTATGAAGAAGAAAAATCCCAGACTCAGTGGGAGAGCTCCCTCACC ATGAGTAGCGCTATGTTGGTACTTGCCTCCCGACCCAGCAGCAGCTCCGTGAGGAT GCCCCCGGCCCCCAGTGCCAGGGGAAGAAGGGGAGACCCCGGTGTCAGCCAGGGATG GGCAAGGGCCAGGTCACCAAACCCATGCCTGTCTTCCAACACCAGGCGGAACGAAGAT GGGTTGGGGGAGCCGAGGGGGCGGGCATCTCCGGATTCCCTCTGACCCGGTGGACCAAG TCCTTACACTCCTTATTGGGCGATCAAGACGGTGTACTCTGTTCCGAACCTACTCGGAG AGGGAGAAATGCGTGGATACCTTAACTTCTGGTTTGCCTGCAATGGATTAGGCAGATG AACCTGAACGATACCCAACTTTTCCAGGTGGCAAAGCGATACTACAAAAGGTACTTTGG GAACAACAGCATTGTTTTCAAACGATTTAAGCCTGCCCAAAACCTACTTAAAGAAGGCA TCAAGGAGCAGCAGGATGGTCCCTCAATGTTATCCACGCCCCAGACCTGGATTCCACTC GCGGATTGGGAGGACAATGCCCTCCACAGTTGCTGGGCCTTGTTTTTTCTCCTCGAT TTTCGTGGGGGCGCGGCGAAAACACCCCTTTTCTTTTCG</pre>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_004655 unedited</p> <pre>TAGCTCTGGACCGCGGCACGCAATCTAGTGATCGGTTTTTTTTTTTTTTTTTTTGA TAAATTTTAATAAAGGCTACATCTCTTAATTACAATAATTATTGTACCAAGTAATTTTC CTTAAATGAACTCTTTATAATGCATAATTTACAGTATAAGTAGAACAAAAATGTCATGACA AAAGTCATTGAGTACAAGACTTGTAAATAAAAAGGCATAAAATATATTTATACATAAACCC CTTTCAAAAAACAAGGGAAGCTTGAGCCCTCAATATAGGGCGACACACGAGCGGGTGA CCGTGCAGGTACAGGTACTGTACTGATTTAAAGTCAAGCACTAGAGATAGTGGATTAATA CTCTTTTGCCGTACACTATATACAGATGTATAGTACAAGTAACAATGGCAAACAGAAATGT ACAGATTAACCTAACACAAAAACCCGAACATCAAAATGAAGGTGTGTGGAGGAAAGGTGC TGCTGGGTCTCCCTACAACCTGTTTCTTTGTGGGGCAGGGGGTAGTTCCTGAATGGC TGTGGTCCAATGACTAATGTAACAAAAACAGAAACAAAAAACAAGGAACTGTCATT TCCACGAAAGCACAGCGCAGTATTCTAGCAGGCCTCAGGGCCCTGGGCCTGGGGAGGC TACATGAGGGGGAGCCTCAGTCACAGGATCAACCTGNGGCCGAATGAGCAGGTTCCCT GCCTCTCCTCTGCAACAGATCATCCCATCCAACACAACCCCAATGTTGATGATGACG CAACATGGTCAACCTCAAGACCTTTAAGACAAACAGAGCAGCCTAGGAAAAAAAAAACA AAACGCACCAATTTCTGCATGTGTCAATGGTAGGGCACCATTTTAAAAAGTCTGTCTAAA CAGTCTGTCTCACCTGGNAGGACGANTGCAAGCATAATTCTCTGTATGAAGAACATGAA CCACCCTAGCTAA</pre>
Restriction Sites:	NotI-NotI
ACCN:	NM_004655
Insert Size:	4156 bp
OTI Disclaimer:	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).
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_004655.2](#)

RefSeq Size: 4259 bp

RefSeq ORF: 4156 bp

Locus ID: 8313

UniProt ID: [Q9Y2T1](#)

Cytogenetics: 17q24.1

Domains: RGS, DAX

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Induced pluripotent stem cells

Protein Pathways: Basal cell carcinoma, Colorectal cancer, Endometrial cancer, Pathways in cancer, Wnt signaling pathway

MW: 153.3 kDa

Gene Summary: The Axin-related protein, Axin2, presumably plays an important role in the regulation of the stability of beta-catenin in the Wnt signaling pathway, like its rodent homologs, mouse conductin/rat axil. In mouse, conductin organizes a multiprotein complex of APC (adenomatous polyposis of the colon), beta-catenin, glycogen synthase kinase 3-beta, and conductin, which leads to the degradation of beta-catenin. Apparently, the deregulation of beta-catenin is an important event in the genesis of a number of malignancies. The AXIN2 gene has been mapped to 17q23-q24, a region that shows frequent loss of heterozygosity in breast cancer, neuroblastoma, and other tumors. Mutations in this gene have been associated with colorectal cancer with defective mismatch repair. [provided by RefSeq, Jul 2008]