

Product datasheet for **RC400179**

Axin 2 (AXIN2) (NM_004655) Human Mutant ORF Clone

Product data:

Product Type:	Mutant ORF Clones
Product Name:	Axin 2 (AXIN2) (NM_004655) Human Mutant ORF Clone
Mutation Description:	V45A
Affected Codon#:	45
Affected NT#:	c.134
Nucleotide Mutation:	AXIN2 Mutant (V45A), Myc-DDK-tagged ORF clone of Homo sapiens axin 2 (AXIN2) as transfection-ready DNA
Effect:	Missense
Symbol:	AXIN2
Synonyms:	AXIL; ODCRCS
E. coli Selection:	Kanamycin (25 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
Tag:	Myc-DDK
ACCN:	NM_004655
ORF Size:	2529 bp
Restriction Sites:	Sgfi-Mlul



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ORF Nucleotide Sequence:

>RC400179 representing NM_004655
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGTAGCGCTATGTTGGTACTTGCCTCCCGACCCAGCAGCAGCTTCCGTGAGGATGCCCCGGGC
 CCCAGTGCCAGGGGAAGAAGGGGAGACCCACCGTGTAGCCAGGGGTGGCAAGGCCAGGCCACCAA
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 TGTTCCGAACCTTCTGGAGAGGGAGAAATGCGTGGATACCTTAGACTTCTGGTTTGCCTGCAATGGATT
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 GCGGGTCACTGCTTCTGCCCTGGGGCAGCGAGTATTACTGCTACTCGAAATGCAAAAGCCACTCCAAG
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 GCTTCCCCGGGAGGAAGGAGACAGGTCCGAGGATGTCTGGCAGTGGATGCTGGAGAGTGAGCGGCAGAGC
 AAGCCCAAGCCCATAGTGCCCAAGCACAAGAAAGGCCTACCCCTTGGAGTCTGCCCGCTCGTCTCCAG
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ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

RefSeq Size:	4241 bp
RefSeq ORF:	2532 bp
Locus ID:	8313
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:	93 kDa
Gene Summary:	<p>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]</p>