

Product datasheet for **RC400180**

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:	R656*
Affected Codon#:	656
Affected NT#:	C1966
Nucleotide Mutation:	AXIN2 Mutant (R656*), Myc-DDK-tagged ORF clone of Homo sapiens axin 2 (AXIN2) as transfection-ready DNA
Effect:	Truncation
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:	1965 bp
Restriction Sites:	Sgfl-Mlul



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ORF Nucleotide
Sequence:

>RC400180 representing NM_004655
Red=Cloning site Blue=ORF Green=Tags(s)

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GCCCGGATCGCC

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GCGAA

ACGGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
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Protein Sequence: >RC400180 representing NM_004655
 Red=Cloning site Green=Tags(s)

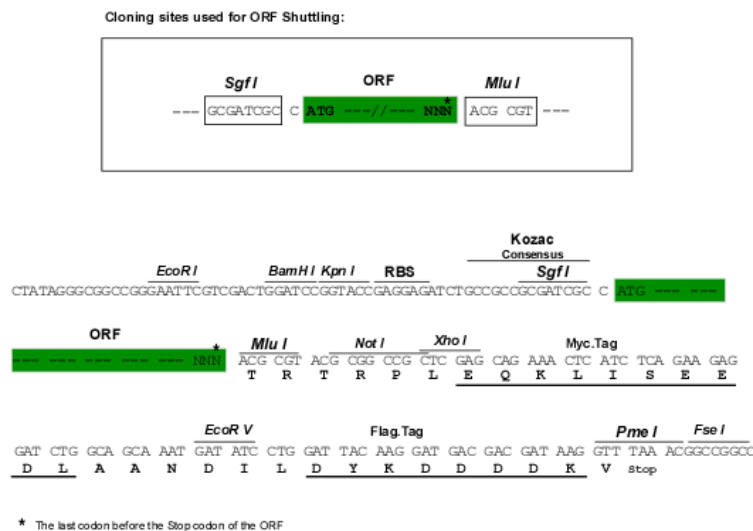
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 NNSIVSKQLKPKATKYIRDGIKKQIDSIMFDQAQTEIQSVMEENAYQMFLTSDIYLEYVRSGGENTAYM
 SNGGLGSLKVVCGYLPPTLNEEEEWTCADFKCKLSPTVVGLSSKTLRATASVRSTETVDSGYRSFKRSDPV
 NPYHIGSGYVAFAPATSANDSEISSDALTDDSMSMTDSSVDGIPPYRVGSKKQLQREMHRSVKANGQVSLP
 HFPRTHRLPKEMTPVEPATFAAELISRLEKLELESRHSLEERLQQIREDEERESELTLSNREGAPTQ
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



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. [More info](#)

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).
RefSeq:	NP_004646
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:	72 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]