

Product datasheet for **RC208349**

Axin 1 (AXIN1) (NM_181050) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Axin 1 (AXIN1) (NM_181050) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Axin 1
Synonyms:	AXIN; PPP1R49
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC208349 representing NM_181050
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAATATCCAAGAGCAGGGTTTCCCCTTGGACCTCGGAGCAAGTTTCACCGAAGATGCTCCCCGACCCC
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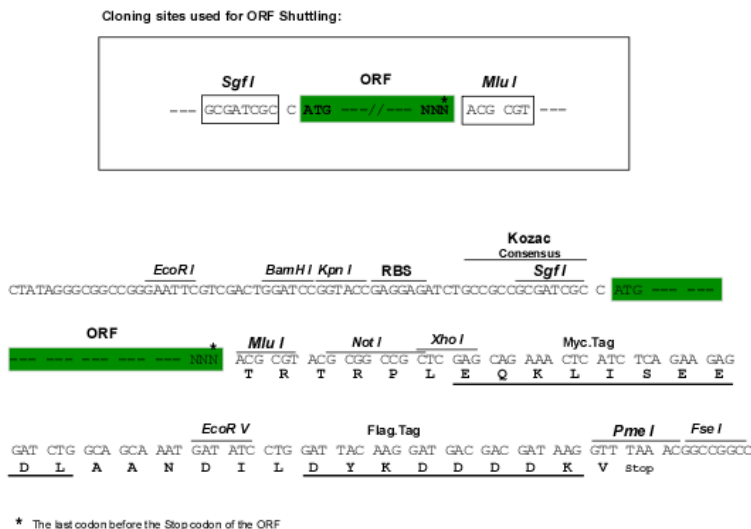
Protein Sequence: >RC208349 representing NM_181050
Red=Cloning site Green=Tags(s)

MNIQEQQGFPLDLGASFTEDAPRPPVPGEEGELVSTDPRPASYSFCSGKGVGKGETSTATPRRSDLDLGY
EPEGSASPTPPYLKWAESLHSLDDQDGI SLFRFLKQEGCADLLDFWFACTGFRKLEPCDSNEEKRLKL
ARAIYRKYILDNNGIVSRQTKPATKSFIKGCIMKQLIDPAMFDQAQTEIQATMEENTYPSFLKSDIYLEY
TRTGSESPKVCSDQSSSGSGTGKGISGYLPTLNEDEEWKCDQDMEEDDGRDAAPPGRLPQKLLLETAAPRV
SSRRYSEGREFRYGWSREPVPNPYYVAGYALAPATSANDEQQLSSDADTSLTDSSVDGIPPYRIRK
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EGEDGDPSSGPPGCHKLPPAPAWHHFPPRCVDMGCAGLRDAHEENPESILDEHVQRVLRTPGRQSPGPG
HRSPDSGHVAKMPVALGGAASGHGKHVPKSGAKLDAAGLHHRHVHHVHHSTARPKEQVEAEATRAQS
SFAWGLEPHSHGARSRGYSESVGAAPNASDGLAHSGKVG VACKRNAKKAESGKSASTEVPGASEDAEKNQ
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PNPLTQLEEARRRLEEEEKRASRAPSKQRTRSQRKVGGSQAQPCDSIVVAYYFCGEPIPYRTLVRGRAVT
LGQFKELLTKKGSYRYFFKVSDEFDCGVVFEVREDEAVLPVFEEKIIGKVEKVD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3302_e01.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:


ACCN: NM_181050

ORF Size: 2478 bp

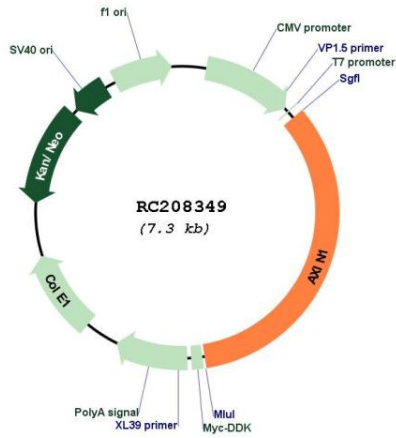
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [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.

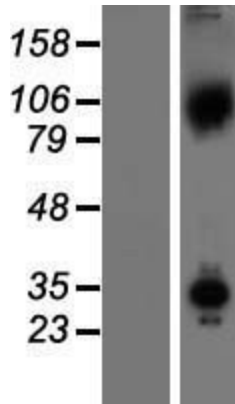
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">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_181050.3
RefSeq Size:	3369 bp
RefSeq ORF:	2481 bp
Locus ID:	8312
UniProt ID:	O15169
Cytogenetics:	16p13.3
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Stem cell relevant signaling - Wnt Signaling pathway
Protein Pathways:	Basal cell carcinoma, Colorectal cancer, Endometrial cancer, Pathways in cancer, Wnt signaling pathway
MW:	91.5 kDa
Gene Summary:	<p>This gene encodes a cytoplasmic protein which contains a regulation of G-protein signaling (RGS) domain and a dishevelled and axin (DIX) domain. The encoded protein interacts with adenomatosis polyposis coli, catenin beta-1, glycogen synthase kinase 3 beta, protein phosphate 2, and itself. This protein functions as a negative regulator of the wntless-type MMTV integration site family, member 1 (WNT) signaling pathway and can induce apoptosis. The crystal structure of a portion of this protein, alone and in a complex with other proteins, has been resolved. Mutations in this gene have been associated with hepatocellular carcinoma, hepatoblastomas, ovarian endometrioid adenocarcinomas, and medullablastomas. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2016]</p>

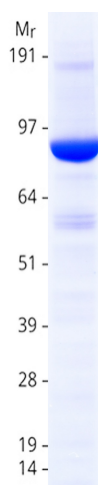
Product images:



Circular map for RC208349



Western blot validation of overexpression lysate (Cat# [LY405798]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208349 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified AXIN1 protein (Cat# [TP308349]). The protein was produced from HEK293T cells transfected with AXIN1 cDNA clone (Cat# RC208349) using MegaTran 2.0 (Cat# [TT210002]).