

## Product datasheet for **SC311505**

### AKNA (NM\_030767) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	AKNA (NM_030767) Human Untagged Clone
Tag:	Tag Free
Symbol:	AKNA
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene sequence for NM_030767 edited

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GTCAGAAGGAAGCACCACACAGAGGGCACAGGCAGGATGGCCGATGCTGACAGGAACCAG
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CTACCCCGTGGCAGCAGCATAACCTCTGCATTTCTGGAATGTGTGCATCAATGATGTTT
GTATATTTGAGGCATTTAAAAATCTATTTTCGTTACGAGGGCAAATGAAGAATGAATATT
GATCTTAAAAAAAAAAAAAAAAAAAA

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<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_030767
<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>OTI Annotation:</b>	There are 4 nucleotide differences between the OriGene clone and the NCBI reference ORF. OriGene considers these to be polymorphisms and to reflect the natural differences between individuals. These result in the substitution of 2 amino acid.
<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>	<u><a href="#">NM_030767.2</a></u> , <u><a href="#">NP_110394.2</a></u>
<b>RefSeq Size:</b>	5385 bp
<b>RefSeq ORF:</b>	4320 bp
<b>Locus ID:</b>	80709
<b>UniProt ID:</b>	<u><a href="#">Q7Z591</a></u>
<b>Cytogenetics:</b>	9q32

**Gene Summary:**

Centrosomal protein that plays a key role in cell delamination by regulating microtubule organization (By similarity). Required for the delamination and retention of neural stem cells from the subventricular zone during neurogenesis (By similarity). Also regulates the epithelial-to-mesenchymal transition in other epithelial cells (By similarity). Acts by increasing centrosomal microtubule nucleation and recruiting nucleation factors and minus-end stabilizers, thereby destabilizing microtubules at the adherens junctions and mediating constriction of the apical endfoot (By similarity). In addition, may also act as a transcription factor that specifically activates the expression of the CD40 receptor and its ligand CD40L/CD154, two cell surface molecules on lymphocytes that are critical for antigen-dependent-B-cell development (PubMed:11268217). Binds to A/T-rich promoters (PubMed:11268217). It is unclear how it can both act as a microtubule organizer and as a transcription factor; additional evidences are required to reconcile these two apparently contradictory functions (Probable).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) differs in the 5' UTR, compared to variant 1. Both variants 1 and 2 encode the same protein (isoform 1).