

Product datasheet for **SC309625**

AKAP13 (NM_007200) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: AKAP13 (NM_007200) Human Untagged Clone
Tag: Tag Free
Symbol: AKAP13
Synonyms: AKAP-13; AKAP-Lbc; ARHGEF13; BRX; c-lbc; HA-3; Ht31; LBC; p47; PRKA13; PROTO-LB; PROTO-LBC
Vector: pCMV6 series
Fully Sequenced ORF: >NCBI ORF sequence for NM_007200, the custom clone sequence may differ by one or more nucleotides

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Restriction Sites:	Please inquire
ACCN:	NM_007200
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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<u>NM_007200.3</u> , <u>NP_009131.2</u>
RefSeq Size:	13290 bp
RefSeq ORF:	8442 bp
Locus ID:	11214
UniProt ID:	<u>Q12802</u>
Cytogenetics:	15q25.3
Domains:	RhoGEF, PH, DAG_PE-bind
Protein Families:	Druggable Genome

Gene Summary:

The A-kinase anchor proteins (AKAPs) are a group of structurally diverse proteins which have the common function of binding to the regulatory subunit of protein kinase A (PKA) and confining the holoenzyme to discrete locations within the cell. This gene encodes a member of the AKAP family. Alternative splicing of this gene results in multiple transcript variants encoding different isoforms containing c-terminal dbl oncogene homology (DH) and pleckstrin homology (PH) domains. The DH domain is associated with guanine nucleotide exchange activation for the Rho/Rac family of small GTP binding proteins, resulting in the conversion of the inactive GTPase to the active form capable of transducing signals. The PH domain has multiple functions. Therefore, these isoforms function as scaffolding proteins to coordinate a Rho signaling pathway, function as protein kinase A-anchoring proteins and, in addition, enhance ligand-dependent activity of estrogen receptors alpha and beta. [provided by RefSeq, Jul 2012]

Transcript Variant: This variant (2) contains an internal alternate in-frame exon in the coding region, as compared to variant 1. Isoform 2 differs from isoform 1 in a small middle region. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.