

## Product datasheet for **RG235301**

### AKAP13 (NM\_001270546) Human Tagged ORF Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids  |
| Product Name:             | AKAP13 (NM_001270546) Human Tagged ORF Clone   |
| Tag:                      | TurboGFP   |
| Symbol:                   | AKAP13   |
| Synonyms:                 | AKAP-13; AKAP-Lbc; ARHGEF13; BRX; c-lbc; HA-3; Ht31; LBC; p47; PRKA13; PROTO-LB; PROTO-LBC |
| Mammalian Cell Selection: | Neomycin   |
| Vector:                   | pCMV6-AC-GFP (PS100010)  |
| E. coli Selection:        | Ampicillin (100 ug/mL)   |
| ORF Nucleotide Sequence:  | >RG235301 representing NM_001270546<br>Red=Cloning site Blue=ORF Green=Tags(s)             |

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Protein Sequence: >RG235301 representing NM\_001270546  
 Red=Cloning site Green=Tags(s)

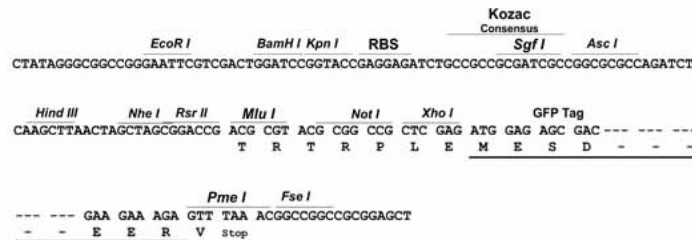
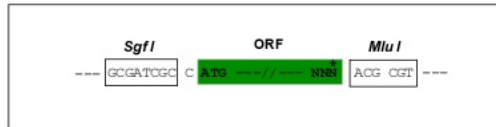
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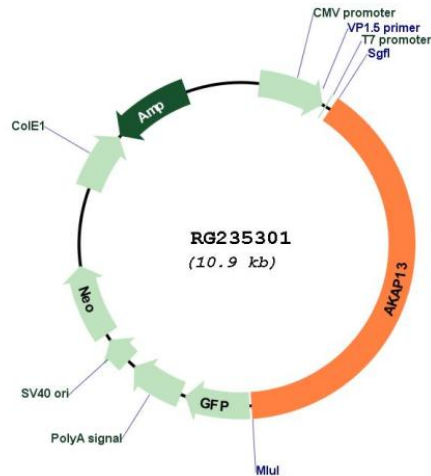
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



**Plasmid Map:**


|                        |  |
|------------------------|--|
| <b>ACCN:</b>           | NM_001270546   |
| <b>ORF Size:</b>       | 4302 bp  |
| <b>OTI Disclaimer:</b> | 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. <a href="#">More info</a> |
| <b>OTI Annotation:</b> | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.   |
| <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>                | <a href="#">NM_001270546.1</a> , <a href="#">NP_001257475.1</a>   |
| <b>RefSeq Size:</b>           | 9146 bp   |
| <b>RefSeq ORF:</b>            | 4305 bp   |
| <b>Locus ID:</b>              | 11214   |
| <b>UniProt ID:</b>            | <a href="#">Q12802</a>  |
| <b>Cytogenetics:</b>          | 15q25.3   |
| <b>Protein Families:</b>      | Druggable Genome  |
| <b>Gene Summary:</b>          | <p>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]</p> |