

Product datasheet for SC312147

OriGene Technologies, Inc.

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MNK2 (MKNK2) (AK092536) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: MNK2 (MKNK2) (AK092536) Human Untagged Clone

Tag: Tag Free Symbol: MKNK2

Synonyms: GPRK7; MNK2

Vector: pCMV6 series

Fully Sequenced ORF: >NCBI ORF sequence for AK092536, the custom clone sequence may differ by one or more

nucleotides

Restriction Sites: Please inquire

ACCN: AK092536

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: 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>AK092536.1</u>, <u>BAG52569.1</u>

RefSeq Size: 2687 bp





MNK2 (MKNK2) (AK092536) Human Untagged Clone - SC312147

 RefSeq ORF:
 450 bp

 Locus ID:
 2872

 Cytogenetics:
 19p13.3

Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Insulin signaling pathway, MAPK signaling pathway

Gene Summary: This gene encodes a member of the calcium/calmodulin-dependent protein kinases (CAMK)

Ser/Thr protein kinase family, which belongs to the protein kinase superfamily. This protein contains conserved DLG (asp-leu-gly) and ENIL (glu-asn-ile-leu) motifs, and an N-terminal polybasic region which binds importin A and the translation factor scaffold protein eukaryotic initiation factor 4G (eIF4G). This protein is one of the downstream kinases activated by mitogen-activated protein (MAP) kinases. It phosphorylates the eukaryotic initiation factor 4E (eIF4E), thus playing important roles in the initiation of mRNA translation, oncogenic transformation and malignant cell proliferation. In addition to eIF4E, this protein also interacts with von Hippel-Lindau tumor suppressor (VHL), ring-box 1 (Rbx1) and Cullin2 (Cul2), which are all components of the CBC(VHL) ubiquitin ligase E3 complex. Multiple alternatively spliced transcript variants have been found, but the full-length nature and biological activity of only two variants are determined. These two variants encode distinct isoforms which differ

in activity and regulation, and in subcellular localization. [provided by RefSeq, Aug 2011]