10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-MNK2 (Phospho-T249) Antibody

Catalog # AP60915

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q9HBH9
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	51875

Additional Information

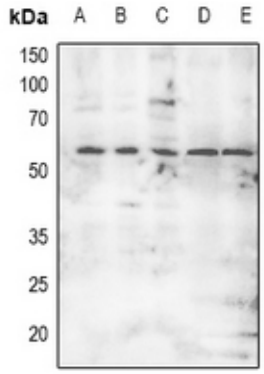
Gene ID	2872
Other Names	GPRK7; MNK2; MAP kinase-interacting serine/threonine-protein kinase 2; MAP kinase signal-integrating kinase 2; MAPK signal-integrating kinase 2; Mnk2
Target/Specificity	KLH-conjugated synthetic phosphopeptide corresponding to residues surrounding T249 of human MNK2 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

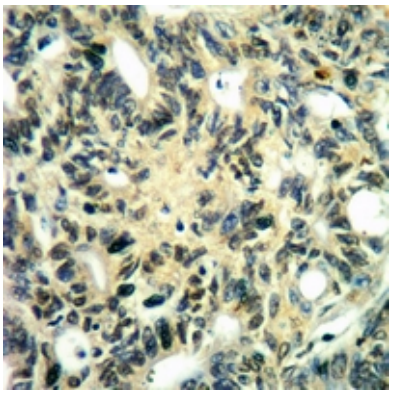
Name	MKNK2
Synonyms	GPRK7, MNK2
Function	Serine/threonine-protein kinase that phosphorylates SFPQ/PSF, HNRNPA1 and EIF4E. May play a role in the response to environmental stress and cytokines. Appears to regulate translation by phosphorylating EIF4E, thus increasing the affinity of this protein for the 7-methylguanosine-containing mRNA cap. Required for mediating PP2A- inhibition-induced EIF4E phosphorylation. Triggers EIF4E shuttling from cytoplasm to nucleus. Isoform 1 displays a high basal kinase activity, but isoform 2 exhibits a very low kinase activity. Acts as a mediator of the suppressive effects of IFNgamma on hematopoiesis. Negative regulator for signals that control generation of arsenic trioxide As(2)O(3)-dependent apoptosis and anti-leukemic responses. Involved in anti-apoptotic signaling in response to serum withdrawal.
Cellular Location	[Isoform 2]: Nucleus, PML body.

Tissue Location	Ubiquitously expressed in all tissues examined. Isoform 2 is expressed at higher levels in the ovary than is isoform 1

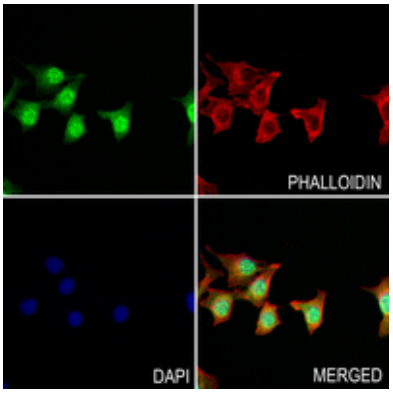
Images



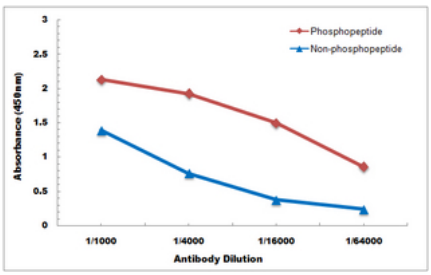
Western blot analysis of MNK2 (Phospho-T249) expression in SGC7901 (A), PC3 (B), Jurkat (C), mouse eye (D), rat brain (E) whole cell lysates. (Predicted band size: 51 kD; Observed band size: 52 kD)



Immunohistochemical analysis of MNK2 (Phospho-T249) staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of MNK2 (Phospho-T249) staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



Direct ELISA antibody dose-response curve using Anti-MNK2 (Phospho-T249) Antibody. Antigen (Phosphopeptide and non-phosphopeptide) concentration is 5 ug/ml. Goat Anti-Rabbit IgG (H&L) - HRP was used as the secondary antibody, and signal was developed by TMB substrate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.