

MNK2 (MKNK2) Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7058a**Specification**

MNK2 (MKNK2) Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	Q9HBH9
Other Accession	Q5U2N4 , Q8CDB0
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	70-100

MNK2 (MKNK2) Antibody (N-term) - Additional Information**Gene ID** 2872**Other Names**

MAP kinase-interacting serine/threonine-protein kinase 2, MAP kinase signal-integrating kinase 2, MAPK signal-integrating kinase 2, Mnk2, MKNK2, GPRK7, MNK2

Target/Specificity

This MNK2 (MKNK2) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 70-100 amino acids from the N-terminal region of human MNK2 (MKNK2).

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

MNK2 (MKNK2) Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MNK2 (MKNK2) Antibody (N-term) - 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.

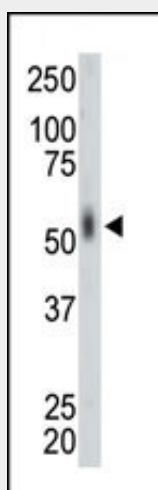
Tissue Location

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

MNK2 (MKNK2) Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

MNK2 (MKNK2) Antibody (N-term) - Images

The anti-MKNK2 Pab (Cat. #AP7058a) is used in Western blot to detect MKNK2 in mouse lung tissue lysate.

MNK2 (MKNK2) Antibody (N-term) - Background

MAP kinase-interacting kinase 1 (Mnk1) and Mnk2, members of the Ser/Thr protein kinase family, bind tightly to the growth factor-regulated MAP kinases, Erk1 and Erk2. Erk and p38 phosphorylate MNK1 and Mnk2, which stimulates their in vitro kinase activity toward a substrate, eukaryotic initiation factor-4E (eIF-4E). Overexpression of Mnk2 results in increased phosphorylation of endogenous eIF-4E, showing that it can act as an eIF-4E kinase in vivo. Mnk2 may play a role in the response to environmental stress and cytokines. This ubiquitously expressed protein appears to regulate transcription by phosphorylating eIF-4E, thus increasing the affinity of this protein for the 7-methylguanosine-containing mRNA cap. Expression of active mutants of MNK1 and MNK2 in 293 cells diminishes cap-dependent translation relative to cap-independent translation in a transient reporter assay. Human Mnk2 is homologous to murine Mnk2 (approximately 94% identical) and human Mnk1 (71% identical). In vitro phosphorylation studies show that Mnk2 is a significantly better substrate than Mnk1 for extracellular signal-regulated kinase 2 (Erk2), p38MAPKalpha, and p38MAPKbeta. Mnk2 has also been shown to interact with the C-terminal regions of eIF-4G1 and eIF-4G2.