



# Mnk1 Polyclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| <b>Catalog No</b>                  | YP-Ab-14859                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Reactivity</b>                  | Human;Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Applications</b>                | WB;IHC;IF;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Gene Name</b>                   | MKNK1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human MKNK1. AA range:111-160                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Specificity</b>                 | Mnk1 Polyclonal Antibody detects endogenous levels of Mnk1 protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Dilution</b>                    | WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Synonyms</b>                    | MKNK1;EC:2.7.11.1;MAP kinase signal-integrating kinase 1;MAP kinase-interacting serine/threonine-protein kinase 1;MAPK signal-integrating kinase 1; Mnk1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Observed Band</b>               | 51kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Calculated Molecular Weight</b> | 51kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Cell Pathway</b>                | [Isoform 2]: Cytoplasm.; [Isoform 3]: Cytoplasm. Nucleus.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Tissue Specificity</b>          | Ubiquitous.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Function</b>                    | catalytic activity:ATP + a protein = ADP + a phosphoprotein., cofactor:Magnesium.,enzyme regulation:Phosphorylated and activated by the p38 kinases and kinases in the Erk pathway.,function:May play a role in the response to environmental stress and cytokines. Appears to regulate transcription by phosphorylating EIF4E, thus increasing the affinity of this protein for the 7-methylguanosine-containing mRNA cap.,PTM: Dual phosphorylation of Thr-250 and Thr-255 activates the kinase. Phosphorylation of Thr-385 activates the kinase.,similarity:Belongs to the protein kinase superfamily., similarity:Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family.,similarity:Contains 1 protein kinase domain.,subunit:Interacts with |



the C-terminal regions of EIF4G1 and EIF4G2. Also binds to dephosphorylated ERK1 and ERK2, and to the p38 kinases.,tissue specificity:Ubiquitous.,

**Background**

MAP kinase interacting serine/threonine kinase 1(MKNK1) Homo sapiens This gene encodes a Ser/Thr protein kinase that interacts with, and is activated by ERK1 and p38 mitogen-activated protein kinases, and thus may play a role in the response to environmental stress and cytokines. This kinase may also regulate transcription by phosphorylating eIF4E via interaction with the C-terminal region of eIF4G. Alternatively spliced transcript variants have been noted for this gene. [provided by RefSeq, Jan 2012],

**matters needing attention**

Avoid repeated freezing and thawing!

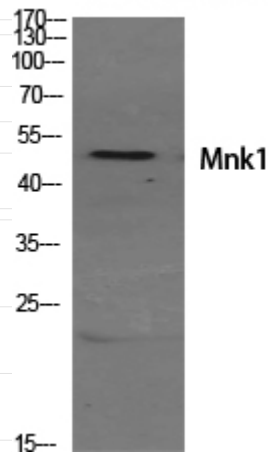
**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



## Products Images

### MOUSE-BRAIN



Western Blot analysis of various cells using Mnk1  
Polyclonal Antibody diluted at 1:500

### HuvEc

(kD)

117-

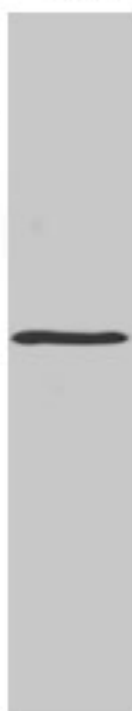
85-

48-

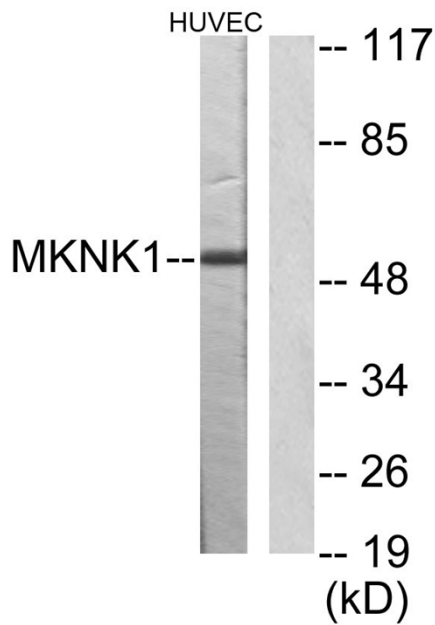
34-

26-

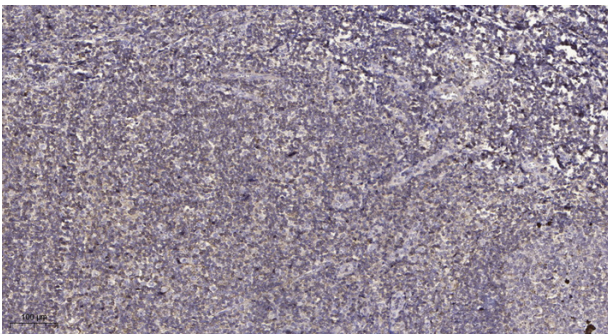
19-



Western Blot analysis of HuvEc cells using Mnk1  
Polyclonal Antibody diluted at 1:500



Western blot analysis of lysates from HUVEC cells, using MKNK1 Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA, pH9.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200(room temperature, 30min).