# MAP3K12 polyclonal antibody

Catalog # PAB2777 Size 400 uL

## Applications



### Western Blot

Western blot analysis of MAP3K12 polyclonal antibody (Cat # PAB2777) in HL-60 cell lysate (lane A) and in mouse kidney tissue lysate (lane B) . MAP3K12 (arrow) was detected using purified polyclonal antibody. Secondary HRP-antirabbit was used for signal visualization with chemiluminescence.



## Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Formalin-fixed and paraffin-embedded human cancer tissue reacted with MAP3K12 polyclonal antibody (Cat # PAB2777), which was peroxidaseconjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma.

Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic peptide of MAP3K12.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to C-terminus of human MAP3K12.
Host	Rabbit
Reactivity	Human, Mouse
Form	Liquid
Purification	Protein G purification



## **Product Information**

Recommend Usage	Western Blot (1:1000) Immunohistochemistry (1:50-100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

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# Gene Info — MAP3K12

Entrez GenelD	7786
Protein Accession#	NP_006292;Q12852
Gene Name	MAP3K12
Gene Alias	DLK, MUK, ZPK, ZPKP1
Gene Description	mitogen-activated protein kinase kinase kinase 12
Omim ID	<u>600447</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	The protein encoded by this gene is a member of serine/threonine protein kinase family. This kina se contains a leucine-zipper domain, and is predominately expressed in neuronal cells. The phos phorylation state of this kinase in synaptic terminals was shown to be regulated by membrane dep olarization via calcineurin. This kinase forms heterodimers with leucine zipper containing transcrip tion factors, such as cAMP responsive element binding protein (CREB) and MYC, and thus may p lay a regulatory role in PKA or retinoic acid induced neuronal differentiation. [provided by RefSeq



## **Product Information**

**Other Designations** 

dual leucine zipper kinase DLK|leucine zipper protein kinase|protein kinase MUK|zipper protein kinase

## **Publication Reference**

SP3 acts as a positive regulator on the core promoter of human ZPK gene.

Itoh A, Wang Z, Ito Y, Reddy UR, Itoh T.

Biochemical and Biophysical Research Communications 2004 Jan; 313(3):612.

 MAPK upstream kinase (MUK)-binding inhibitory protein, a negative regulator of MUK/dual leucine zipperbearing kinase/leucine zipper protein kinase.

Fukuyama K, Yoshida M, Yamashita A, Deyama T, Baba M, Suzuki A, Mohri H, Ikezawa Z, Nakajima H, Hirai S, Ohno S. The Journal of Biological Chemistry 2000 Jul; 275(28):21247.

Application: IF, Monkey, COS-1 cells

 ZPK inhibits PKA induced transcriptional activation by CREB and blocks retinoic acid induced neuronal differentiation.

Reddy UR, Basu A, Bannerman P, Ikegaki N, Reddy CD, Pleasure D. Oncogene 1999 Aug; 18(31):4474.

Application: Func, IF, IHC, KA, WB-Ce, WB-Re, Mouse, NIH/3T3, NT2 cells, Recombinant protein

## Pathway

• MAPK signaling pathway

### Disease

- Genetic Predisposition to Disease
- Mouth Neoplasms
- Precancerous Conditions
- Thyroid Neoplasms