

**MAP3K12 Antibody**  
**Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM2057b****Specification**

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**MAP3K12 Antibody - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q12852</a>
Other Accession	<a href="#">NP_001180440.1</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	93219
Antigen Region	828-859

**MAP3K12 Antibody - Additional Information****Gene ID** 7786**Other Names**

Mitogen-activated protein kinase kinase kinase 12, Dual leucine zipper bearing kinase, DLK, Leucine-zipper protein kinase, ZPK, MAPK-upstream kinase, MUK, Mixed lineage kinase, MAP3K12, ZPK

**Target/Specificity**

This MAP3K12 antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 828-859 amino acids from human MAP3K12.

**Dilution**

WB~~1:500~1000

E~~Use at an assay dependent concentration.

**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**

MAP3K12 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**MAP3K12 Antibody - Protein Information****Name** MAP3K12

### Synonyms ZPK

**Function** Part of a non-canonical MAPK signaling pathway (PubMed:[28111074](#)). Activated by APOE, enhances the AP-1-mediated transcription of APP, via a MAP kinase signal transduction pathway composed of MAP2K7 and MAPK1/ERK2 and MAPK3/ERK1 (PubMed:[28111074](#)). May be an activator of the JNK/SAPK pathway.

### Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q60700}. Cell membrane {ECO:0000250|UniProtKB:Q60700}. Note=Behaves essentially as an integral membrane protein. {ECO:0000250|UniProtKB:Q60700}

### Tissue Location

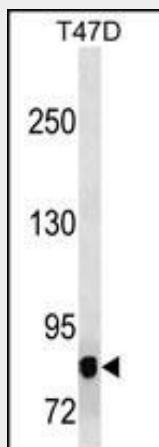
Highly expressed in brain and kidney.

## MAP3K12 Antibody - 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](#)

## MAP3K12 Antibody - Images



MAP3K12 Antibody (Cat. #AM2057b) western blot analysis in T47D cell line lysates (35µg/lane). This demonstrates the MAP3K12 antibody detected the MAP3K12 protein (arrow).

## MAP3K12 Antibody - Background

This gene encodes a member of the serine/threonine protein kinase family. This kinase contains a leucine-zipper domain and is predominately expressed in neuronal cells. The phosphorylation state of this kinase in synaptic terminals was shown to be regulated by membrane depolarization via calcineurin. This kinase

forms heterodimers with leucine zipper containing transcription factors, such as cAMP responsive element binding protein (CREB) and MYC, and thus may play a regulatory role in PKA or retinoic acid induced neuronal differentiation. Alternatively spliced transcript variants encoding different proteins have been described.[provided by RefSeq].

#### **MAP3K12 Antibody - References**

Clague, J., et al. Mol. Carcinog. 49(2):183-189(2010)  
Robitaille, H., et al. J. Invest. Dermatol. 130(1):74-85(2010)  
Landa, I., et al. PLoS Genet. 5 (9), E1000637 (2009) :  
Daviau, A., et al. Cell. Signal. 21(4):577-587(2009)  
Mukhopadhyay, R., et al. Mol. Cell 32(3):371-382(2008)