

## Mouse Taok2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14470c

## **Specification**

## Mouse Taok2 Antibody (Center) - Product Information

Application WB,E
Primary Accession Q6ZQ29

Other Accession Q9JLS3, NP\_001157246.1

Reactivity
Predicted
Rat
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Human
Rat
Rabbit
Rabbit
Polyclonal
Rabbit IgG
Alsotype
Antigen Region

415-443

# Mouse Taok2 Antibody (Center) - Additional Information

## Gene ID 381921

## **Other Names**

Serine/threonine-protein kinase TAO2, Thousand and one amino acid protein 2, Taok2, Kiaa0881

## Target/Specificity

This Mouse Taok2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 415-443 amino acids from the Central region of mouse Taok2.

## **Dilution**

WB~~1:1000

## **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### 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**

Mouse Taok2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## Mouse Taok2 Antibody (Center) - Protein Information

## Name Taok2

Synonyms Kiaa0881



Function Serine/threonine-protein kinase involved in different processes such as membrane blebbing and apoptotic bodies formation DNA damage response and MAPK14/p38 MAPK stress-activated MAPK cascade. Phosphorylates itself, MBP, activated MAPK8, MAP2K3, MAP2K6 and tubulins. Activates the MAPK14/p38 MAPK signaling pathway through the specific activation and phosphorylation of the upstream MAP2K3 and MAP2K6 kinases. In response to DNA damage, involved in the G2/M transition DNA damage checkpoint by activating the p38/MAPK14 stressactivated MAPK cascade, probably by mediating phosphorylation of upstream MAP2K3 and MAP2K6 kinases. May affect microtubule organization and stability. May play a role in the osmotic stress-MAPK8 pathway. Prevents MAP3K7-mediated activation of CHUK, and thus NF-kappa-B activation. Isoform 2, but not isoform 1, is required for PCDH8 endocytosis. Following homophilic interactions between PCDH8 extracellular domains, isoform 2 phosphorylates and activates MAPK14/p38 MAPK which in turn phosphorylates isoform 2. This process leads to PCDH8 endocytosis and CDH2 cointernalization. Both isoforms are involved in MAPK14/p38 MAPK activation (By similarity).

# **Cellular Location**

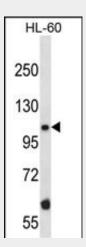
Cytoplasmic vesicle membrane; Multi-pass membrane protein. Cytoplasm, cytoskeleton. Note=Found to be perinuclear and localized to vesicular compartment.

# Mouse Taok2 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Mouse Taok2 Antibody (Center) - Images

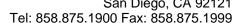


Mouse Taok2 Antibody (Center) (Cat. #AP14470c) western blot analysis in HL-60 cell line lysates (35ug/lane). This demonstrates the Taok2 antibody detected the Taok2 protein (arrow).

## Mouse Taok2 Antibody (Center) - Background

Taok2 may play a role in apoptotic morphological changes. May affect microtubule organization







and stability. May play a role in the osmotic stress-MAPK8 pathway. Activates the JNK MAP kinase pathway through the specific activation of the upstream MKK3 and MKK6 kinases. Prevents MAP3K7-mediated activation of IKKA, and thus NF-kappa-B activation. Phosphorylates itself, MBP, activated MAPK8 and tubulins (By similarity).

# Mouse Taok2 Antibody (Center) - References

Blackshaw, S., et al. PLoS Biol. 2 (9), E247 (2004) : Thuret, S., et al. Mol. Cell. Neurosci. 25(3):394-405(2004) Zambrowicz, B.P., et al. Proc. Natl. Acad. Sci. U.S.A. 100(24):14109-14114(2003) Okazaki, N., et al. DNA Res. 10(4):167-180(2003)