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Mouse Taok2 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP14470c

Specification

Mouse Taok2 Antibody (Center) Blocking Peptide - Product Information

Primary Accession Q6ZQ29

Mouse Taok2 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 381921

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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Mouse Taok2 Antibody (Center) Blocking Peptide - 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.

Mouse Taok2 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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)

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 stress- activated 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) Blocking Peptide - Protocols

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

- Blocking Peptides