

TAOK1 / TAO1 Antibody (Internal)
Rabbit Polyclonal Antibody
Catalog # ALS10882**Specification**

TAOK1 / TAO1 Antibody (Internal) - Product Information

Application	IHC
Primary Accession	Q7L7X3
Reactivity	Human, Mouse, Rabbit, Hamster, Monkey, Pig, Horse, Xenopus, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	116kDa KDa

TAOK1 / TAO1 Antibody (Internal) - Additional Information**Gene ID** 57551**Other Names**

Serine/threonine-protein kinase TAO1, 2.7.11.1, Kinase from chicken homolog B, hKFC-B, MARK Kinase, MARKK, Prostate-derived sterile 20-like kinase 2, PSK-2, PSK2, Prostate-derived STE20-like kinase 2, Thousand and one amino acid protein kinase 1, TAOK1, hTAOK1, TAOK1, KIAA1361, MAP3K16, MARKK

Target/Specificity

Human TAOK1. BLAST analysis of the peptide immunogen showed no homology with other human proteins, except TAOK3 (63%).

Reconstitution & Storage

Long term: -70°C; Short term: +4°C

Precautions

TAOK1 / TAO1 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

TAOK1 / TAO1 Antibody (Internal) - Protein Information**Name** TAOK1**Synonyms** KIAA1361, MAP3K16, MARKK**Function**

Serine/threonine-protein kinase involved in various processes such as p38/MAPK14 stress-activated MAPK cascade, DNA damage response and regulation of cytoskeleton stability. Phosphorylates MAP2K3, MAP2K6 and MARK2. Acts as an activator of the p38/MAPK14 stress-activated MAPK cascade by mediating phosphorylation and subsequent activation of the upstream MAP2K3 and MAP2K6 kinases. Involved in G-protein coupled receptor signaling to p38/MAPK14. 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 MAP2K3 and MAP2K6. Acts as a regulator of cytoskeleton stability by phosphorylating 'Thr-208' of MARK2, leading to activate MARK2 kinase activity and subsequent phosphorylation and detachment of MAPT/TAU from microtubules. Also acts as a regulator of apoptosis: regulates apoptotic morphological changes, including cell contraction, membrane blebbing and apoptotic bodies formation via activation of the MAPK8/JNK cascade. Plays an essential role in the regulation of neuronal development in the central nervous system (PubMed:33565190). Also plays a role in the regulation of neuronal migration to the cortical plate (By similarity).

Cellular Location

Cytoplasm.

Tissue Location

Highly expressed in the testis, and to a lower extent also expressed in brain, placenta, colon and skeletal muscle

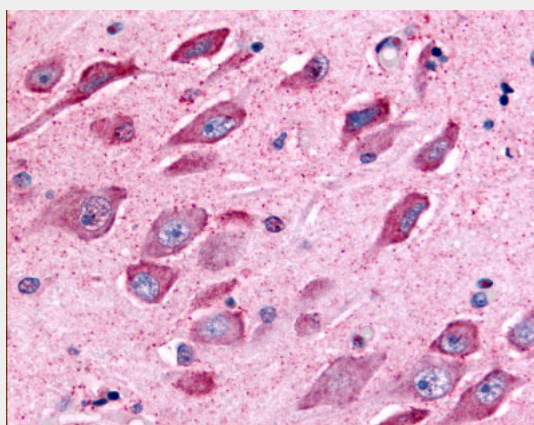
Volume

50 µl

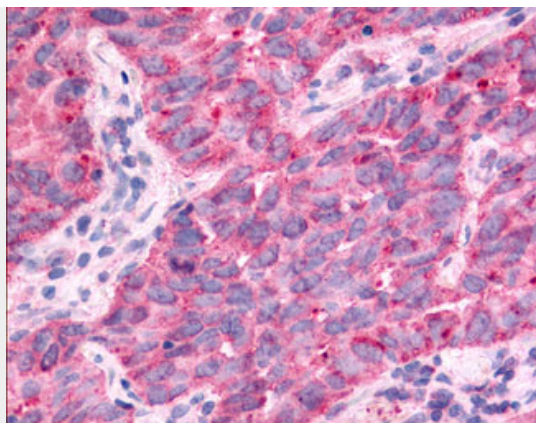
TAOK1 / TAO1 Antibody (Internal) - Protocols

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](#)

TAOK1 / TAO1 Antibody (Internal) - Images

Anti-TAOK1 antibody ALS10882 IHC of human brain, hippocampus.



Anti-TAOK1 / TAO1 antibody IHC of human Lung, Non-Small Cell Carcinoma.

TAOK1 / TAO1 Antibody (Internal) - Background

Serine/threonine-protein kinase involved in various processes such as p38/MAPK14 stress-activated MAPK cascade, DNA damage response and regulation of cytoskeleton stability. Phosphorylates MAP2K3, MAP2K6 and MARK2. Acts as an activator of the p38/MAPK14 stress-activated MAPK cascade by mediating phosphorylation and subsequent activation of the upstream MAP2K3 and MAP2K6 kinases. Involved in G-protein coupled receptor signaling to p38/MAPK14. 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 MAP2K3 and MAP2K6. Acts as a regulator of cytoskeleton stability by phosphorylating 'Thr-208' of MARK2, leading to activate MARK2 kinase activity and subsequent phosphorylation and detachment of MAPT/TAU from microtubules. Also acts as a regulator of apoptosis: regulates apoptotic morphological changes, including cell contraction, membrane blebbing and apoptotic bodies formation via activation of the MAPK8/JNK cascade.

TAOK1 / TAO1 Antibody (Internal) - References

Yustein J.T.,et al.Oncogene 22:6129-6141(2003).
Jenkins S.G.,et al.Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
Matsuda A.,et al.Patent number WO2004058805, 15-JUL-2004.
Nagase T.,et al.DNA Res. 7:65-73(2000).
Ota T.,et al.Nat. Genet. 36:40-45(2004).