

**TAOK1 / TAO1 Antibody (Internal)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS10919****Specification**

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**TAOK1 / TAO1 Antibody (Internal) - Product Information**

Application	IHC
Primary Accession	<a href="#">Q7L7X3</a>
Reactivity	Human, Monkey
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.

**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:<a href="http://www.uniprot.org/citations/33565190" target="\_blank">33565190</a>). 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

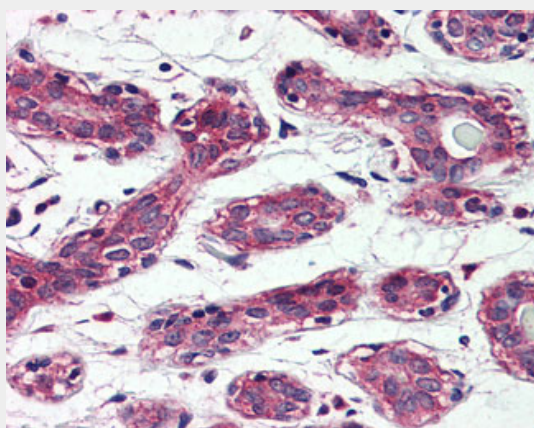
**Volume**

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 ALS10919 IHC of human breast.

**TAOK1 / TAO1 Antibody (Internal) - Background**

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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).