

Anti-TAO1 Antibody
Rabbit polyclonal antibody to TAO1
Catalog # AP60640**Specification**

Anti-TAO1 Antibody - Product Information

Application	WB, IH
Primary Accession	Q7L7X3
Other Accession	Q5F2E8
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	116070

Anti-TAO1 Antibody - Additional Information**Gene ID** 57551**Other Names**

KIAA1361; MAP3K16; MARKK; Serine/threonine-protein kinase TAO1; 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

Target/Specificity

Recognizes endogenous levels of TAO1 protein.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200)

IH~~WB (1/500 - 1/1000), IH (1/100 - 1/200)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-TAO1 Antibody - 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

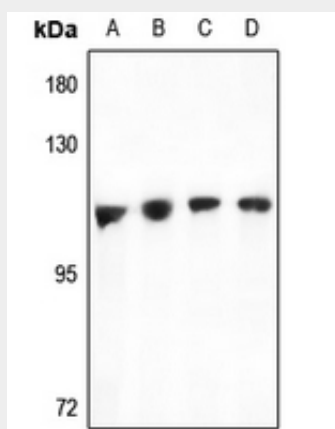
Highly expressed in the testis, and to a lower extent also expressed in brain, placenta, colon and skeletal muscle

Anti-TAO1 Antibody - Protocols

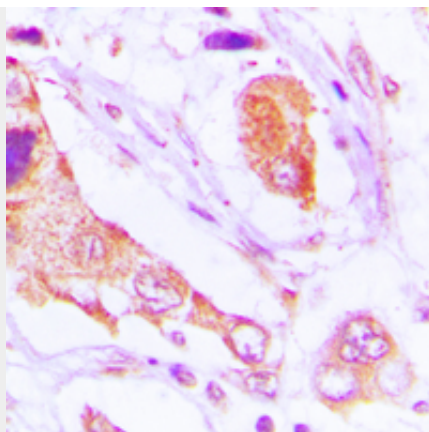
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-TAO1 Antibody - Images



Western blot analysis of TAO1 expression in HEK293T (A), A2780 (B), mouse testis (C), rat testis (D) whole cell lysates.



Immunohistochemical analysis of TAO1 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Anti-TAO1 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human TAO1. The exact sequence is proprietary.