

TAOK1 Antibody

Purified Rabbit Polyclonal Antibody Catalog # ABV11557

Specification

TAOK1 Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Calculated MW

WB, IP
O7L7X3
NP_065842.1
Human, Mouse
Rabbit
Polyclonal
Rabbit IgG
116070

TAOK1 Antibody - Additional Information

Gene ID 57551

Other Names

TAOK1, TAO kinase 1, MARKK, Microtubule affinity regulating kinase kinase, MAP3K16, PSK2, TAO1

Target/Specificity

TAOK1

Formulation

 $100~\mu l$ affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 0.5% BSA and 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Background Descriptions

Precautions

TAOK1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TAOK1 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/a>).

Cellular Location Cytoplasm.

Tissue Location

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

Also plays a role in the regulation of neuronal migration to the cortical plate (By similarity).

TAOK1 Antibody - Protocols

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

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

TAOK1 Antibody - Images

TAOK1 Antibody - Background

Serine/threonine-protein kinase TAO1 is an enzyme that in humans is encoded by the TAOK1 gene