

TAOK1 Antibody

Rabbit mAb

Catalog # AP93033

Product Information

Application	WB
Primary Accession	Q7L7X3
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	hKFC B; MAP3K16; MARK kinase; MARKK; PSK2; STE20 like kinase; Taok1;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	116070

Additional Information

Dilution	WB 1:500~1:2000
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human TAOK1
Description	Phosphorylates MKK3 (By similarity). Activates the p38 MAP kinase pathway through the specific activation of the upstream MKK3 kinase.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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).

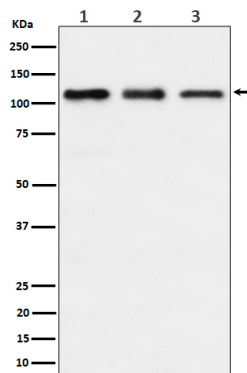
Cellular Location

Cytoplasm.

Tissue Location

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

Images



Western blot analysis of TAOK1 expression in (1) HeLa cell lysate; (2) RAW 264.7 cell lysate; (3) C6 cell lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.