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Phospho-TAOK1/2/3 (Ser181/Ser181/Ser177) (4Y15) Rabbit Monoclonal Antibody

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Catalog # AP93816

Product Information

Application	WB
Primary Accession	Q7L7X3, Q9H2K8, Q9HC79, Q9UL54
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Calculated MW	116070

Additional Information

Gene ID	57551
Dilution	WB~~1:1000
Storage Conditions	-20℃

Protein Information

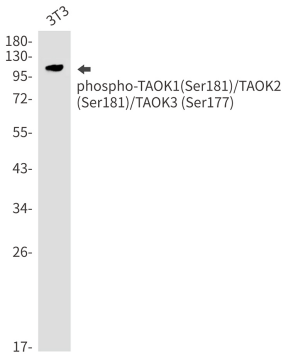
Name	TAOK1
Synonyms	KIAA1361, MAP3K16, MARKK
Function	Serine/threonine-protein kinase involved in various processes such as p38/MAPK14 stress-activated MAPK cascade, DNA damage response and regulation of cytoskeleton stability. Phosphorylates MAP2K3, MAP2K6 and MARK2. Acts as an activator of the p38/MAPK14 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

Background

The protein encoded by this gene is a serine/threonine protein kinase that activates the p38/MAPK14 stress-activated MAPK cascade but inhibits the basal activity of the MAPK8/JNK cascade. The encoded protein is a member of the GCK subfamily of STE20-like kinases. [provided by RefSeq, Oct 2016]

Images



Western blot detection of TAOK1 (phospho-Ser181)/TAOK2 (phospho-Ser181)/TAOK3 (phospho-Ser177) in Hela,A549,HL-60,U2OS,C6 cell lysates using TAOK1 (phospho-Ser181)/TAOK2 (phospho-Ser181)/TAOK3 (phospho-Ser177) antibody(1:1000 diluted).

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