

Serine/threonine-Protein Kinase TAO1 (TAOK1) Antibody

Catalogue No.: abx033166



TAOK1 is an upstream activator of Mark. TAOK1 phosphorylated Mark on a threonine within its activation loop. In brain, TAOK1 also phosphorylated a fraction of Mark on a nearby serine, and this phosphorylation inhibited Mark activity. In cells, TAOK1 activity enhanced microtubule dynamics through activation of Mark and led to phosphorylation and detachment of microtubule-associated proteins from microtubules. TAOK1 also activated JNK in vitro. Overexpression of TAOK1 in a human nonsmall cell lung carcinoma cell line induced apoptotic morphologic changes, including cell contraction, membrane blebbing, and apoptotic body formation. Apoptotic stimuli increased the catalytic activity of endogenous TAOK1 and JNK, and dominant-negative JNK or JNK inhibition blocked the apoptotic morphologic responses to TAOK1. TAOK1 also stimulated cleavage and activation of ROCK1 by caspases, leading to cell contraction and membrane blebbing. TAOK1 was itself a substrate for caspase-3. TAOK1 is indeed involved in the execution phase of apoptosis.

Target:	Serine/threonine-Protein Kinase TAO1 (TAOK1)
Clonality:	Polyclonal
Reactivity:	Human
Tested Applications:	ELISA, WB
Host:	Rabbit
Recommended dilutions:	WB: 1/1000. Optimal dilutions/concentrations should be determined by the end user.
Conjugation:	Unconjugated
Immunogen:	KLH-conjugated synthetic peptide between 620-650 amino acids from the Central region of human TAOK1.
Isotype:	IgG
Form:	Liquid
Purification:	Purified through a protein G column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS.
Storage:	Aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.

Datasheet

Version: 3.0.0

Revision date: 18 Mar 2025



UniProt Primary AC: Q7L7X3 ([UniProt](#), [ExPASy](#))

KEGG: hsa:57551

String: [9606.ENSP00000261716](#)

Molecular Weight: Calculated MW: 116 kDa

Buffer: PBS containing 0.09% sodium azide.

Specificity: Predicted to react with Mouse, Rat and Xenopus TAOK1.

Note: THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.

For Reference Only