

## Product datasheet for **AP20077PU-N**

### TAOK1 (C-term) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IHC
Recommended Dilution:	<b>ELISA.</b> <b>Immunohistochemistry on Paraffin Sections:</b> 5 µg/ml.
Reactivity:	Human, Rat, Bovine, Bat, Canine, Chicken, Equine, Hamster, Monkey, Mouse, Porcine, Rabbit, Xenopus
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	TAOK1 antibody was raised against synthetic 17 amino acid peptide from C-Terminus of human TAOK1.
Specificity:	Reacts with C-Terminus TAO Kinase 1 (TAOK1).
Formulation:	PBS containing 0.09% Sodium Azide as preservative State: Aff - Purified State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Immunoaffinity Chromatography
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C to -70°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	TAO kinase 1
Database Link:	<a href="#">Entrez Gene 216965 Mouse</a> <a href="#">Entrez Gene 286993 Rat</a> <a href="#">Entrez Gene 57551 Human</a> <a href="#">Q7L7X3</a>



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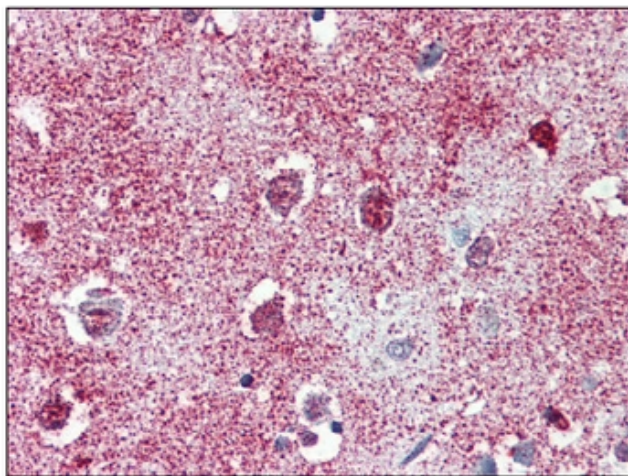
**Background:** TAOK1 is an upstream activator of Mark. TAOK1 phosphorylated Mark on a threonine within its activation loop. In brain, TAOK1 also phosphorylated a fraction of Mark on a nearby serine, and this phosphorylation inhibited Mark activity. In cells, TAOK1 activity enhanced microtubule dynamics 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.

**Synonyms:** Serine/threonine-protein kinase TAO1, KFC-B, MAP3K16, KIAA1361

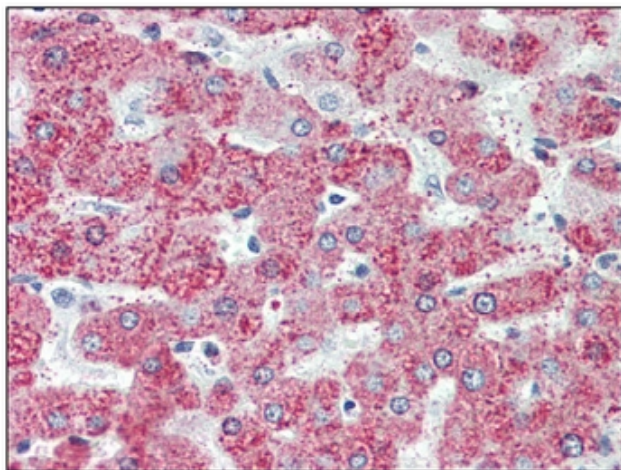
**Protein Families:** Druggable Genome, Protein Kinase

**Protein Pathways:** MAPK signaling pathway

### Product images:



Immunohistochemistry: TAOK1 antibody staining of Formalin-Fixed, Paraffin-Embedded Human Brain, Cortex.



Immunohistochemistry: TAOK1 antibody staining of Formalin-Fixed, Paraffin-Embedded Human Liver.