

**Anti-TAOK2 / TAO2 Antibody (clone 2E2)**  
**Mouse Anti Human Monoclonal Antibody**  
**Catalog # ALS17646****Specification**

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**Anti-TAOK2 / TAO2 Antibody (clone 2E2) - Product Information**

Application	WB, IHC-P, E
Primary Accession	<a href="#">Q9UL54</a>
Predicted	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a,k
Calculated MW	138251

**Anti-TAOK2 / TAO2 Antibody (clone 2E2) - Additional Information****Gene ID** 9344**Alias Symbol** **TAOK2****Other Names**

TAOK2, Kinase from chicken homolog C, HKFC-C, PSK, PSK-1, PSK1-BETA, TAO1, TAO kinase 2, TAO2, PSK1, KIAA0881, MAP3K17

**Reconstitution & Storage**

Protein A purified

**Precautions**

Anti-TAOK2 / TAO2 Antibody (clone 2E2) is for research use only and not for use in diagnostic or therapeutic procedures.

**Anti-TAOK2 / TAO2 Antibody (clone 2E2) - Protein Information****Name** TAOK2**Synonyms** KIAA0881, MAP3K17, PSK, PSK1**Function**

Serine/threonine-protein kinase involved in different processes such as membrane blebbing and apoptotic bodies formation DNA damage response and MAPK14/p38 MAPK stress-activated MAPK cascade. Phosphorylates itself, MBP, activated MAPK8, MAP2K3, MAP2K6 and tubulins. Activates the MAPK14/p38 MAPK signaling pathway through the specific activation and phosphorylation of the upstream MAP2K3 and MAP2K6 kinases. 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 upstream MAP2K3 and MAP2K6 kinases. Isoform 1, but not isoform 2, plays a role in apoptotic morphological changes, including cell contraction, membrane blebbing and apoptotic bodies formation. This function, which requires the activation of MAPK8/JNK and nuclear localization of C- terminally truncated isoform 1, may be linked to the mitochondrial CASP9-associated death pathway. Isoform 1 binds to microtubules and affects their

organization and stability independently of its kinase activity. Prevents MAP3K7-mediated activation of CHUK, and thus NF- kappa-B activation, but not that of MAPK8/JNK. May play a role in the osmotic stress-MAPK8 pathway. Isoform 2, but not isoform 1, is required for PCDH8 endocytosis. Following homophilic interactions between PCDH8 extracellular domains, isoform 2 phosphorylates and activates MAPK14/p38 MAPK which in turn phosphorylates isoform 2. This process leads to PCDH8 endocytosis and CDH2 cointernalization. Both isoforms are involved in MAPK14 phosphorylation.

**Cellular Location**

Cytoplasmic vesicle membrane; Multi-pass membrane protein. Cytoplasm, cytoskeleton Nucleus. Note=Catalytically active full-length phosphorylated isoform 1 localizes to microtubules in the cytoplasm predominantly on microtubule cables positioned around the nucleus. A C-terminally truncated form of isoform 1 is present in the nucleus; isoform 2 and kinase-defective, as well as full-length isoform 1 are excluded from the nucleus

**Tissue Location**

Ubiquitously expressed, with a higher level of expression in testis and brain.

**Anti-TAOK2 / TAO2 Antibody (clone 2E2) - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-TAOK2 / TAO2 Antibody (clone 2E2) - Images**