

Datasheet for ABIN968499

anti-TAO Kinase 2 antibody (AA 352-550)[Go to Product page](#)**2** Images**1** Publication

Overview

Quantity:	50 µg
Target:	TAO Kinase 2 (TAOK2)
Binding Specificity:	AA 352-550
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This TAO Kinase 2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Rat TAO1 aa. 352-550
Clone:	22-TAO1
Isotype:	IgG2a
Cross-Reactivity:	Mouse (Murine), Human
Characteristics:	<ol style="list-style-type: none">1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.2. Please refer to us for technical protocols.3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

Product Details

chromatography.

Target Details

Target:	TAO Kinase 2 (TAOK2)
Alternative Name:	TAO1 (TAOK2 Products)
Background:	Mitogen activated protein kinases (MAPKs) are critical components of several signal transduction pathways that convert extracellular stimuli into cellular responses. Four groups of MAPKs (ERKs, JNKs, p38, and ERK5) have been identified in mammalian cells. MAPK pathways contain a 3-kinase cascade consisting of a MAPK, a MAP/ERK kinase (MEK), and a MEK kinase (MEKK). MEKK phosphorylation of MEKs leads to activation and subsequent MEK-mediated phosphorylation of both Thr and Tyr residues at the Thr-X-Tyr dual phosphorylation motif of MAPKs. TAO1 was isolated from a rat cDNA library using the sequence from yeast Ste20p kinase. Sequence analysis shows that TAO1 contains an N-terminal Ser/Thr protein kinase domain, an acidic domain, and two serine-rich domains. The catalytic domain of TAO1 is 40% identical to the p21-activated kinases, PAK1 and PAK2, and 33% identical to MEKK1. TAO1 expression is highest in brain, but it is also detected in heart and lung. TAO1 can activate MEK3, MEK4, and MEK6 from the stress-responsive MAPK pathway, but not MEK1 or 2 from the classical MAPK pathway. Thus, TAO1 may be an important MEKK in the p38-containing stress-responsive MAPK pathway.
Molecular Weight:	116 kDa
Pathways:	Cell-Cell Junction Organization

Application Details

Comment:	Related Products: ABIN968545, ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide

Handling

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

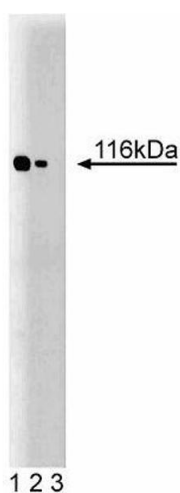
Storage: -20 °C

Storage Comment: Store undiluted at -20°C.

Publications

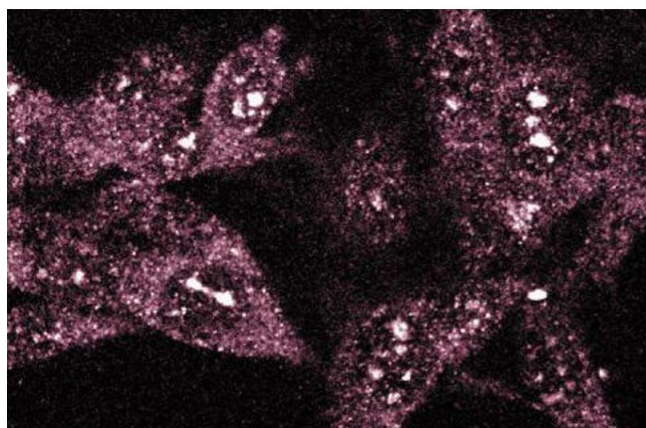
Product cited in: Hutchison, Berman, Cobb: "Isolation of TAO1, a protein kinase that activates MEKs in stress-activated protein kinase cascades." in: **The Journal of biological chemistry**, Vol. 273, Issue 44, pp. 28625-32, (1998) ([PubMed](#)).

Images



Western Blotting

Image 1. Western blot analysis of TAO1 on a rat cerebrum lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the mouse anti-TAO1 antibody.



Immunofluorescence

Image 2. Immunofluorescence staining of RSV-3T3 cells.