

Product datasheet

Anti-TAOK2 antibody ab238854

1 Image

Overview

Product name	Anti-TAOK2 antibody
Description	Rabbit polyclonal to TAOK2
Host species	Rabbit
Tested applications	Suitable for: IHC-P
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment corresponding to Human TAOK2 aa 719-880. Database link: Q9UL54
Positive control	IHC-P: Human liver cancer tissue.
General notes	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.</p> <p>Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.</p>

Properties

Form	Liquid
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Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Constituents: 50% Glycerol (glycerin, glycerine), PBS, 0.03% Proclin 300
Purity	Protein G purified
Purification notes	Purity greater than 95%.
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab238854** in the following tested applications.

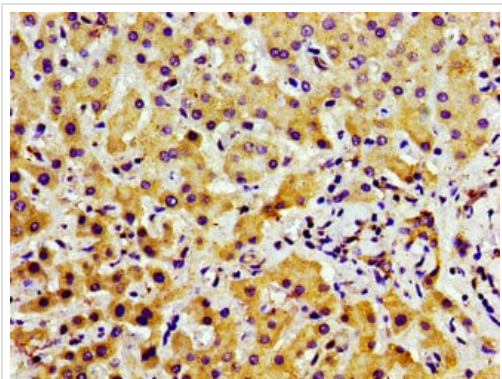
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/20 - 1/200.

Target

Function	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, but not isoform 2, activates the JNK MAP kinase pathway through the specific activation of the upstream MKK3 and MKK6 kinases. Isoform 1 binds to microtubules and affects their organization and stability independently of its kinase activity. Prevents MAP3K7-mediated activation of IKKA, and thus NF-kappa-B activation, but not that of JNK. Phosphorylates itself, MBP, activated MAPK8 and tubulins. 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 (By similarity). Both isoforms are involved in MAPK14 phosphorylation.
Tissue specificity	Ubiquitously expressed, with a higher level of expression in testis and brain.
Sequence similarities	Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. STE20 subfamily. Contains 1 protein kinase domain.
Post-translational modifications	Isoforms 1 and 2 are autophosphorylated. C-terminal cleavage of isoform 1 and subsequent nuclear localization requires CASP9 activity. isoform 2 is phosphorylated at 'Ser-1031' by MAPK14. This phosphorylation is required PCDH8 for endocytosis.
Cellular localization	Cytoplasmic vesicle membrane. Cytoplasm > cytoskeleton. Nucleus. 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 and Cell projection > dendrite. In dendrites, colocalizes with PCDH8.

Images



Paraffin-embedded human liver cancer tissue stained for TAOK2 using ab238854 at 1/100 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TAOK2 antibody (ab238854)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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