

Product datasheet for TA386880

OriGene Technologies, Inc.

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TAOK1 Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: IF, IHC, WB

Recommended Dilution: Recommended dilution: WB:1:1000-1:5000, IHC:1:200-1:500, IF:1:50-1:200

Reactivity: Human
Host: Rabbit
Isotype: IgG

Clonality: Polyclonal

Immunogen: Recombinant Human Serine/threonine-protein kinase TAO1 protein (400-659AA)

Formulation: Preservative: 0.03% Proclin 300

Constituents: 50% Glycerol, 0.01M PBS, pH 7.4

Concentration: lot specific

Purification: >95%, Protein G purified

Conjugation: Unconjugated

Storage: Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Stability: 1 year from dispatch.

Database Link: Q7L7X3

Background: Serine/threonine-protein kinase involved in various processes such as p38/MAPK14 stress-

activated MAPK cascade, DNA damage response and regulation of cytoskeleton stability. Phosphorylates MAP2K3, MAP2K6 and MARK2. Acts as an activator of the p38/MAPK14 stress-activated MAPK cascade by mediating phosphorylation and subsequent activation of the upstream MAP2K3 and MAP2K6 kinases. Involved in G-protein coupled receptor signaling to p38/MAPK14. 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 MAP2K3 and MAP2K6. Acts as a regulator of cytoskeleton stability by phosphorylating 'Thr-208' of MARK2, leading to activate MARK2 kinase activity and subsequent phosphorylation and detachment of MAPT/TAU from microtubules. Also acts as a regulator of apoptosis: regulates apoptotic morphological changes, including cell contraction,

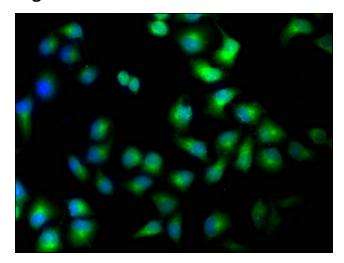
membrane blebbing and apoptotic bodies formation via activation of the MAPK8/JNK

cascade.

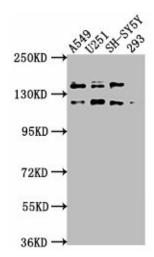




Product images:



Immunofluorescence staining of Hela cells with TA386880 at 1:100, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Western Blot

Positive WB detected in: A549 whole cell lysate, U251 whole cell lysate, SH-SY5Y whole cell lysate, 202 whole cell lysate.

293 whole cell lysate

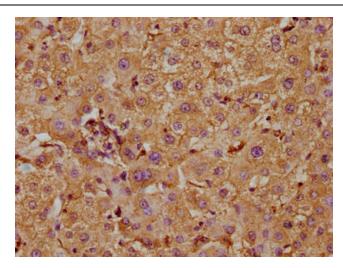
All lanes: TAOK1 antibody at 1:2000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 117, 47, 98 kDa Observed band size: 117 kDa





IHC image of TA386880 diluted at 1:300 and staining in paraffin-embedded human liver tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.