

**DATASHEET**

**TAO1 Rabbit Polyclonal Antibody**

CAT. NO. APA10062

**KEY FEATURES**

|               |   |               |                     |
|---------------|---|---------------|---------------------|
| Target        | TAO1  | Source / Host | Rabbit              |
| Reactivity    | Human, Mouse, Rat   | Clonality     | Polyclonal          |
| Applications  | WB, IHC, IF/ICC   | Conjugation   | Unconjugated        |
| Form / Buffer | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |               | Storage<br>at -20°C |

**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.

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

|        |                |
|--------|----------------|
| WB     | 1:500 - 1:1000 |
| IHC    | 1:100 - 1:200  |
| IF/ICC | 1:50 - 1:200   |

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

|                   |  |
|-------------------|--|
| Description       | Rabbit polyclonal antibody to TAO1   |
| Specificity       | Recognizes endogenous levels of TAO1 protein.  |
| Antibody Type     | Primary antibody   |
| Immunogen         | KLH-conjugated synthetic peptide encompassing a sequence within the center region of human TAO1. The exact sequence is proprietary.  |
| Purification      | The antibody was purified by immunogen affinity chromatography.  |
| Molecular Weight  | Predicted: 116 kD; Observed: 116 kD  |
| Form/Buffer       | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.  |
| Alternative Names | KIAA1361; MAP3K16; MARKK; Serine/threonine-protein kinase TAO1; Kinase from chicken homolog B; hKFC-B; MARK Kinase; MARKK; Prostate-derived sterile 20-like kinase 2; PSK-2; PSK2; Prostate-derived STE20-like kinase 2; Thousand and one amino acid protein kinase 1; TAOK1; hTAOK1 |
| Gene Symbol       | TAOK1  |
| Entrez Gene       | 57551(Human); 216965(Mouse); 286993(Rat)   |
| SwissProt         | Q7L7X3(Human); Q5F2E8(Mouse); O88664(Rat)  |

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

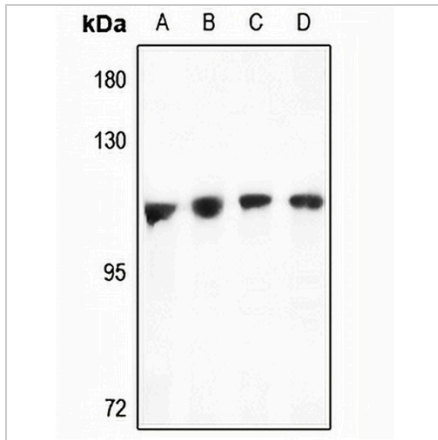
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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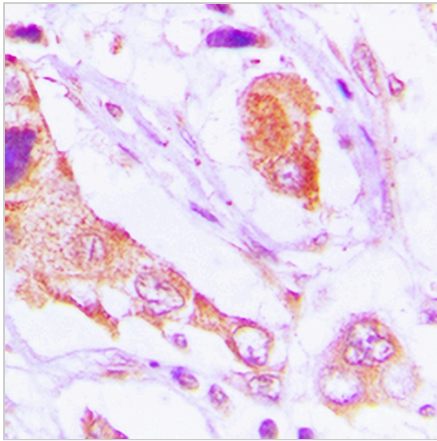
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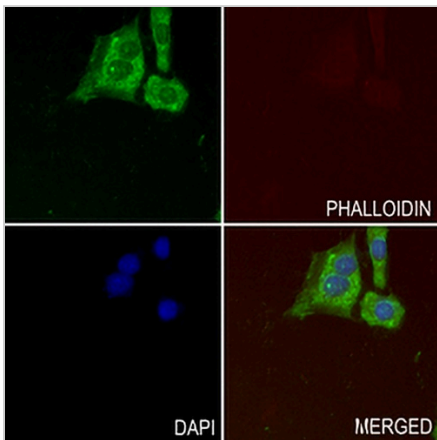
**DATA**



Western blot analysis of TAO1 expression in HEK293T (A), A2780 (B), mouse testis (C), rat testis (D) whole cell lysates. (Predicted band size: 116 kD; Observed band size: 116 kD)



Immunohistochemical analysis of TAO1 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of TAO1 staining in LS8 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.