DATASHEET

TAK1 Rabbit Polyclonal Antibody

CAT. NO. APA09377

KEY FEATURES

Target	TAK1	**Source / Host**	Rabbit
Reactivity	Human, Mouse, Rat, Bovine, Pig, Zebrafish	**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**	at-20°C

BACKGROUND

Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway . Plays an important role in the cascades of cellular responses evoked by changes in the environment . Mediates signal transduction of TRAF6, various cytokines including interleukin-1 (IL-1), transforming growth factor-beta (TGFB), TGFB-related factors like BMP2 and BMP4, toll-like receptors (TLR), tumor necrosis factor receptor CD40 and B-cell receptor (BCR) . Once activated, acts as an upstream activator of the MKK/JNK signal transduction cascade and the p38 MAPK signal transduction cascade through the phosphorylation and activation of several MAP kinase kinases like MAP2K1/MEK1, MAP2K3/MKK3, MAP2K6/MKK6 and MAP2K7/MKK7 .

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 TAK1
Specificity	Recognizes endogenous levels of TAK1 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human TAK1. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 53; Observed: 70 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	TAK1; Mitogen-activated protein kinase kinase kinase 7; Transforming growth factor-beta-activated kinase 1; TGF-beta-activated kinase 1
Gene Symbol	MAP3K7
Entrez Gene	6885(Human); 26409(Mouse); 100910771; 313121(Rat)
SwissProt	O43318(Human); Q62073(Mouse); P0C8E4(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact 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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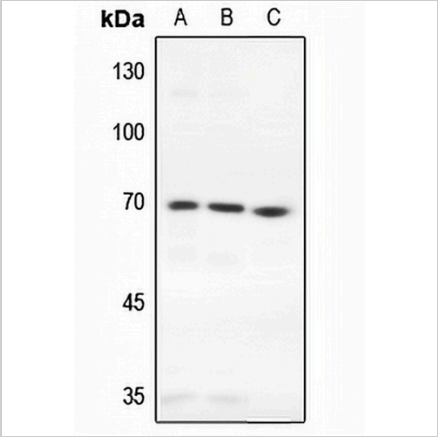
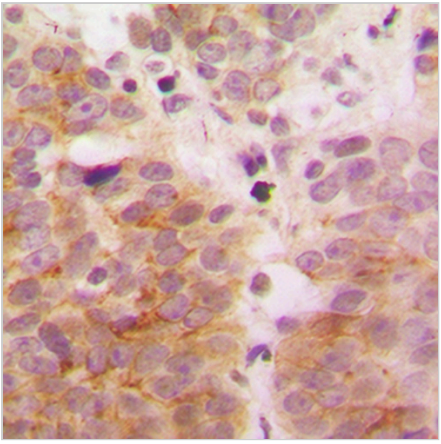
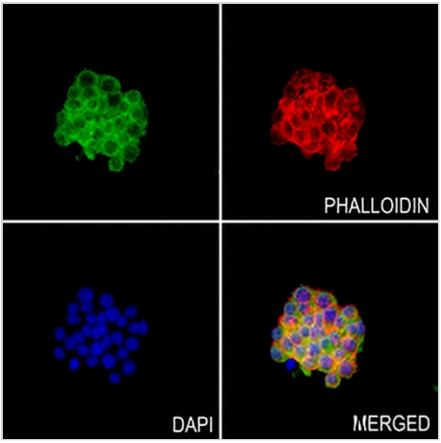
DATA



Western blot analysis of TAK1 expression in mouse lung (A), mouse liver (B), rat liver (C) whole cell lysates. (Predicted band size: 53; 56; 64; 67 kD; Observed band size: 70 kD)



Immunohistochemical analysis of TAK1 staining in human breast 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 TAK1 staining in MDAMB231 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 hidified 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.