

ARG63986 anti-TAK1 / MAP3K7 antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes TAK1 / MAP3K7
Tested Reactivity	Hu, Ms
Predict Reactivity	Cow, Rat
Tested Application	FACS, WB
Specificity	This antibody is expected to recognise isoform A (NP_003179.1) and isoform B (NP_663304.1).
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	TAK1 / MAP3K7
Species	Human
Immunogen	C-AELDQDEKDQQNT
Conjugation	Un-conjugated
Alternate Names	TAK1; Mitogen-activated protein kinase kinase kinase 7; EC 2.7.11.25; Transforming growth factor-beta-activated kinase 1; TGF-beta-activated kinase 1; MEKK7; TGF1a

Application Instructions

Application table	Application	Dilution
	FACS	10 µg/ml
	WB	1 - 3 µg/ml

Application Note
WB: Recommend incubate at RT for 1h.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purified from goat serum by antigen affinity chromatography.
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links

[GeneID: 26409 Mouse](#)

[GeneID: 6885 Human](#)

[Swiss-port # O43318 Human](#)

[Swiss-port # Q62073 Mouse](#)

Background

The protein encoded by this gene is a member of the serine/threonine protein kinase family. This kinase mediates the signaling transduction induced by TGF beta and morphogenetic protein (BMP), and controls a variety of cell functions including transcription regulation and apoptosis. In response to IL-1, this protein forms a kinase complex including TRAF6, MAP3K7P1/TAB1 and MAP3K7P2/TAB2; this complex is required for the activation of nuclear factor kappa B. This kinase can also activate MAPK8/JNK, MAP2K4/MKK4, and thus plays a role in the cell response to environmental stresses. Four alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq, Jul 2008]

Research Area

Cancer antibody; Cell Biology and Cellular Response antibody; Immune System antibody; Signaling Transduction antibody

Calculated Mw

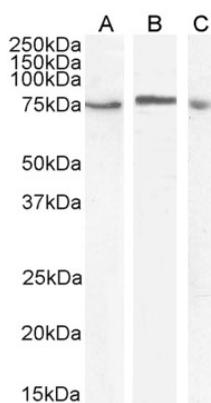
67 kDa

PTM

Association with TAB1/MAP3K7IP1 promotes autophosphorylation at Ser-192 and subsequent activation. Association with TAB2/MAP3K7IP2, itself associated with free unanchored Lys-63 polyubiquitin chain, promotes autophosphorylation and subsequent activation of MAP3K7. Dephosphorylation at Ser-192 by PPM1B/PP2CB and at Thr-187 by PP2A and PPP6C leads to inactivation.

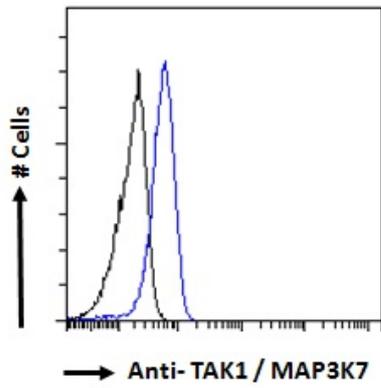
'Lys-48'-linked polyubiquitination at Lys-72 is induced by TNFalpha, and leads to proteasomal degradation. Undergoes 'Lys-48'-linked polyubiquitination catalyzed by ITCH (By similarity). Requires 'Lys-63'-linked polyubiquitination for autophosphorylation and subsequent activation. 'Lys-63'-linked ubiquitination does not lead to proteasomal degradation. Deubiquitinated by CYLD, a protease that selectively cleaves 'Lys-63'-linked ubiquitin chains. Deubiquitinated by Y.enterocolitica YopP.

Images



ARG63986 anti-TAK1 / MAP3K7 antibody WB image

Western blot: 35 µg of HeLa (A), U937 (B) and Daudi (C) cell lysates (in RIPA buffer) stained with ARG63986 anti-TAK1 / MAP3K7 antibody at 1 µg/ml (A, B) and 2 µg/ml (C) dilutions and incubated at RT for 1 hour.



ARG63986 anti-TAK1 / MAP3K7 antibody FACS image

Flow Cytometry: Paraformaldehyde-fixed HeLa cells permeabilized with 0.5% Triton. Cells were stained with ARG63986 anti-TAK1 / MAP3K7 antibody (blue line) at 10 $\mu\text{g}/\text{ml}$ dilution for 1 hour, followed by incubation with Alexa FluorR 488 labelled secondary antibody. IgG control: Unimmunized goat IgG (black line).



ARG63986 anti-TAK1 / MAP3K7 antibody WB image

Western blot: 35 μg of NIH/3T3 cell lysate (in RIPA buffer) stained with ARG63986 anti-TAK1 / MAP3K7 antibody at 2 $\mu\text{g}/\text{ml}$ dilution and incubated at RT for 1 hour.