Datasheet for ABIN6241044

anti-TR4 antibody (pSer439)

2 Images

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Overview

Quantity:	50 µL
Target:	TR4 (NR2C2)
Binding Specificity:	AA 410-444, pSer439
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TR4 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	This Phospho-TAK1 (Ser439) antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 410-444 amino acids from the human TAK1.
Clone:	RB56649
Isotype:	Ig Fraction
Predicted Reactivity:	Rat
Purification:	This antibody is purified through a protein A column, followed by peptide affinity purification.

Target Details

Target:	TR4 (NR2C2)
Alternative Name:	TAK1 (NR2C2 Products)

Target Details

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). Ceramides are also able to activate MAP3K7/TAK1. 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. These MAP2Ks in turn activate p38 MAPKs, c-jun N-terminal kinases (JNKs) and I-kappa-B kinase complex (IKK). Both p38 MAPK and JNK pathways control the transcription factors activator protein-1 (AP-1), while nuclear factor-kappa B is activated by IKK. MAP3K7 activates also IKBKB and MAPK8/JNK1 in response to TRAF6 signaling and mediates BMP2- induced apoptosis. In osmotic stress signaling, plays a major role in the activation of MAPK8/JNK1, but not that of NF-kappa-B. Promotes TRIM5 capsid-specific restriction activity.
Molecular Weight:	67196
UniProt:	O43318
Pathways:	TCR Signaling, Nuclear Receptor Transcription Pathway, Steroid Hormone Mediated Signaling Pathway, Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process, Production of Molecular Mediator of Immune Response, Tube Formation, Toll-Like Receptors Cascades

Application Details

Application Notes:	IF: 1:25. WB: 1:1000
Restrictions:	For Research Use only

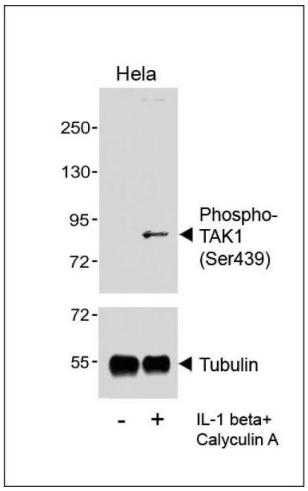
Handling

Format:	Liquid
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

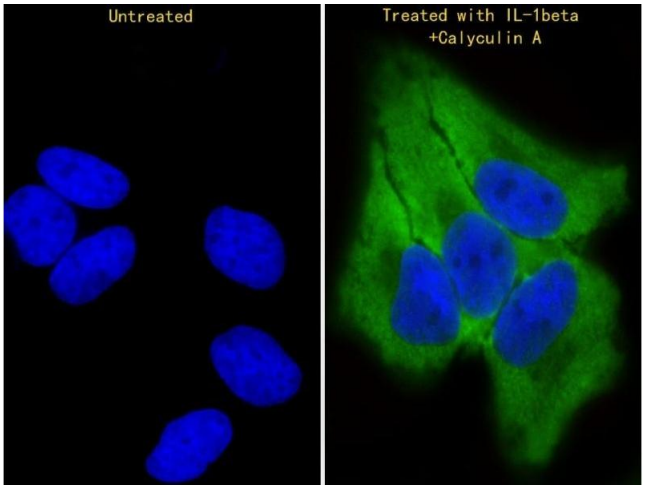
Storage:	4 °C,-20 °C
Expiry Date:	6 months

Images



Western Blotting

Image 1. Western blot analysis of lysates from Hela cell line, untreated or treated with IL-1beta(20 ng/mL) +Calyculin A(100 nM), using (upper) or Tubulin (lower).



Immunofluorescence

Image 2. Immunofluorescent analysis of 4 % paraformaldehyde-fixed, 0.1 % Triton X-100 permeabilized Hela (human cervical epithelial adenocarcinoma cell line)[Hela-C:Serum-starve overnight,Hela--IL-1+CA:IL-1beta(20 ng/mL) +Calyculin A(100 nM),10 min,right] cells labeling Phospho-TAK1 (Ser439) with at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (1583138) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm staining on Hela cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (PD18466410) at 1/100 dilution (red).The nuclear counter stain is DI (blue).