

Product datasheet

Recombinant human TAK1 protein ab132950

2 Images

Description

Product name Recombinant human TAK1 protein

Purity >= 80 % Purified via GST Tag.

Expression system Wheat germ

Accession [O43318-2](#)

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

Sequence

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MSTASAASSSSSSSAGEMIEAPSQVLNFEEIDYKEIEVEE
VVGRGAFGVV
CKAKWRAKDVAIKQIESESERKAFIVELRQLSRVNHPIVK
LYGACLNPV
CLVMEYAEAGGSLYNVLHGAELPYTAAHAMSACLQCSQ
GVAYLHSMQPK
ALIHRLDKPPNLLL VAGGTVLKICDFGTACDIQTHMTNNG
SAAWMAPEV
FEGSNYSEKCDVFSWGILWEVITRRKPFDEIGGPAFRIMW
AVHNGTRPP
LIKNLPKPIESLMTRCWSKDPSQRPSMEEIVKIMTHLMRYF
PGADEPLQY
PCQYSEGGQNSATSTGSMFMDIANTSNKSDTNMEQVP
ATNDTIKRLES
KLLKNQAKQQSESGLSLGASRGSSVESLPPTSEGKRM
SADMSEIARIA
ATTGNGQPRRRSIQDLTVTGTGTEPGQVSSRSSSPSVRMIT
SGPTSEKPTR
SHPWTPDDSTDNTGSDNSIPMAYLTDHQLQPLAPCPNS
KESMAVFEQHC
KMAQEYMKVQTEIALLLQRKQELVAELDQDEKDQQNTSR
LVQEHKKLLDE
NKSLSTYYQQCKKQLEVIRSQQQKRQGTS

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Predicted molecular weight 89 kDa including tags

Amino acids 1 to 579

Specifications

Our **Abpromise guarantee** covers the use of **ab132950** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies SDS-PAGE Western blot ELISA
Form	Liquid

Additional notes

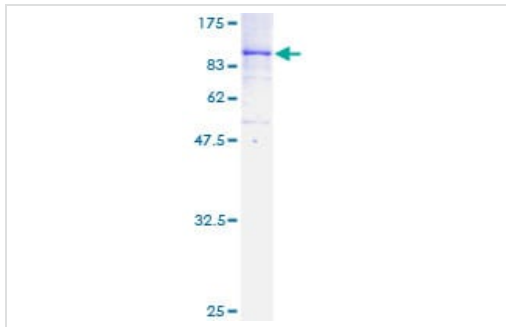
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl This product is an active protein and may elicit a biological response in vivo, handle with caution.
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General Info

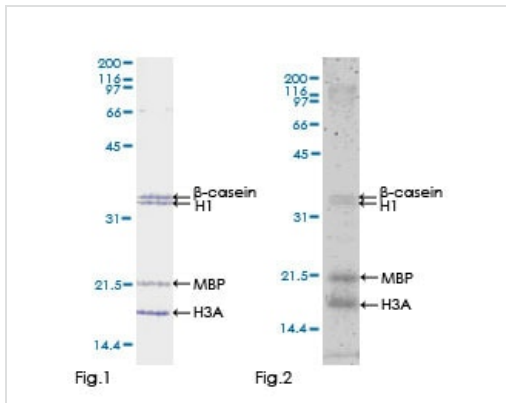
Function	Component of a protein kinase signal transduction cascade. Mediator of TRAF6 and TGF-beta signal transduction. Activates IKBKB and MAPK8 in response to TRAF6 signaling. Stimulates NF-kappa-B activation and the p38 MAPK pathway. In osmotic stress signaling, plays a major role in the activation of MAPK8/JNK, but not that of NF-kappa-B.
Sequence similarities	Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase kinase subfamily. Contains 1 protein kinase domain.
Post-translational modifications	Association with TAB1/MAP3K7IP1 promotes autophosphorylation 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 Thr-187 by PP2A and PPP6C leads to inactivation. Ubiquitinated, leading to proteasomal degradation (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



12.5% SDS-PAGE analysis of ab132950 stained with Coomassie Blue.

SDS-PAGE - Recombinant human TAK1 protein (ab132950)



Kinase assay using ab132950 and [γ - 32 P] ATP.

Fig 1: SDS-PAGE gel

Fig 2: Autoradiograph of SDS-PAGE gel

Kinase substrates:

H3 histone, family 3A - calf thymus - Molecular weight: approx. 16.5-17 kDa on SDS-PAGE

Myelin basic protein - bovine brain - Molecular weight: approx. 21-22 kDa on SDS-PAGE

Histone H1.0 - calf thymus - Molecular weight: approx. 32-33 kDa on SDS-PAGE

Beta-casein protein - bovine milk - Molecular weight: approx. 33-34 kDa on SDS-PAGE

Functional Studies - Recombinant human TAK1 protein (ab132950)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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