10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

ASK1/MAPKKK5 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10101

Specification

ASK1/MAPKKK5 Antibody - Product Information

Application	**WB, IF**
Primary Accession	Q99683
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**154537**

ASK1/MAPKKK5 Antibody - Additional Information

Gene ID 4217

Application & Usage	**Western blot analysis (1-4 µg/ml). However, the optimal conditions should be determined individually. The immunoaffinity purified antibody detects the 155 kDa ASK1 protein in human SW1353 cell lysate by immunoblotting.**

Other Names
MAP3K5, MEKK5, ASK-1 , MAPKKK5

Target/Specificity
ASK1/MAPKKK5

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
100 µg (0.2 mg/ml) immunoaffinity purified, rabbit anti-ASK1 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA, 0.02% sodium azide.

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions

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ASK1/MAPKKK5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ASK1/MAPKKK5 Antibody - Protein Information

Name MAP3K5

Synonyms ASK1, MAPKKK5, MEKK5

Function
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 signaling for determination of cell fate such as differentiation and survival. Plays a crucial role in the apoptosis signal transduction pathway through mitochondria-dependent caspase activation. MAP3K5/ASK1 is required for the innate immune response, which is essential for host defense against a wide range of pathogens. Mediates signal transduction of various stressors like oxidative stress as well as by receptor-mediated inflammatory signals, such as the tumor necrosis factor (TNF) or lipopolysaccharide (LPS). 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 MAP2K4/SEK1, MAP2K3/MKK3, MAP2K6/MKK6 and MAP2K7/MKK7. These MAP2Ks in turn activate p38 MAPKs and c-jun N-terminal kinases (JNKs). Both p38 MAPK and JNKs control the transcription factors activator protein-1 (AP-1).

Cellular Location
Cytoplasm. Endoplasmic reticulum. Note=Interaction with 14-3-3 proteins alters the distribution of MAP3K5/ASK1 and restricts it to the perinuclear endoplasmic reticulum region

Tissue Location
Abundantly expressed in heart and pancreas.

ASK1/MAPKKK5 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ASK1/MAPKKK5 Antibody - Images

ASK1/MAPKKK5 Antibody - Background

ASK1 (Apoptosis Signal-regulating Kinase 1) activates two different subgroups of MAPKK, MKK4 and MKK6, which in turn activate c-Jun N-terminal Kinase (JNK) and p38 MAP Kinase. ASK1 is activated by TNFR and Fas thro µgh the interaction with members of the TRAF Family and the Fas-associated protein Daxx. Overexpression of ASK1 induces apoptosis. However, a catalytically inactive form of ASK1 has been shown to inhibit TNF-α induced apoptosis.