

Rabbit anti-Human, Mouse ASK1 Monoclonal Antibody | anti-ASK1 antibody

Anti-ASK1 Rabbit Monoclonal Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA47001	Rabbit	Human, Mouse	Western Blot, Immunocytochemistry, Immunohistochemistry, Immunofluorescence, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

ASK1; Monoclonal Antibody; Anti-ASK1 Rabbit Monoclonal Antibody; Mitogen-activated protein kinase kinase kinase 5; 2.7.11.25; Apoptosis signal-regulating kinase 1; ASK-1; MAPK/ERK kinase kinase 5; MEK kinase 5; MEKK 5; MAP3K5; MAPKKK5; MEKK5; anti-ASK1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Monoclonal
Purity/Purification	Affinity-chromatography
Form/Format	Liquid
Sequence Length	621
Applicable Applications for anti-ASK1 antibody	WB (Western Blot), ICC (Immunocytochemistry), IHC (Immunohistochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry)
Immunogen	A synthesized peptide derived from human ASK1
Subcellular Localization	Cytoplasm. Endoplasmic reticulum. Interaction with 14-3-3 proteins alters the distribution of MAP3K5/ASK1 and restricts it to the perinuclear endoplasmic reticulum region.
Tissue Specificity	Abundantly expressed in heart and pancreas.
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



IHC (Immunohistochemistry)

Immunohistochemical analysis of paraffin-embedded human breast cancer, using ASK1 Antibody(AAA47001)MAP3K5 was detected in paraffin-embedded tissue section. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-MAP3K5 Antibody (AAA47001)overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Western blot analysis of ASK1 expression in HeLa cell lysates (AAA47001).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-MAP3K5 monoclonal antibody overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for MAP3K5

ADDITIONAL INFORMATION

Related Product Information for anti-ASK1 antibody	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).
Product Categories/Family for anti-ASK1 antibody	Cell Biology; Apoptosis; Intracellular; Kinases; Cardiovascular; Heart; Hypertrophy

NCBI AND UNIPROT INFORMATION

NCBI GI #	5174547
NCBI GeneID	4217
NCBI Accession #	NP_005914.1
NCBI GenBank Nucleotide #	NM_005923.3
UniProt Accession #	Q99683; Q5THN3; Q99461; A6NIA0; B4DGB2
Molecular Weight	154537 MW
NCBI Official Full Name	mitogen-activated protein kinase kinase kinase 5
NCBI Official Synonym Full Names	mitogen-activated protein kinase kinase kinase 5
NCBI Official Symbol	MAP3K5
NCBI Official Synonym Symbols	ASK1; MEKK5; MAPKKK5
NCBI Protein Information	mitogen-activated protein kinase kinase kinase 5
UniProt Protein Name	Mitogen-activated protein kinase kinase kinase 5
UniProt Gene Name	MAP3K5
UniProt Synonym Gene Names	ASK1; MAPKKK5; MEKK5; ASK-1; MEK kinase 5; MEKK 5

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.