

# **ASK1 Antibody**

Rabbit mAb Catalog # AP90384

### **Product Information**

**Application** WB, IHC, IF, FC, ICC, IHF

Primary Accession <u>Q99683</u>

Reactivity Human, Mouse Clonality Monoclonal

Other Names Apoptosis signal- regulating kinase 1;ASK-1;MAP3K5;ASK1;MAPKKK5; MEK

kinase 5;MEKK5;

IsotypeRabbit IgGHostRabbitCalculated MW154537

#### **Additional Information**

**Dilution** WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:50

**Purification** Affinity-chromatography

Immunogen A synthesized peptide derived from human ASK1

**Description** Mitogen-activated protein kinase (MAPK) signaling cascades include MAPK or

extracellular signal-regulated kinase (ERK), MAPK kinase (MKK or MEK), and MAPK kinase kinase (MAPKKK or MEKK). MAPKK kinase/MEKK phosphorylates and activates its downstream protein kinase, MAPK kinase/MEK, which in turn

activates MAPK.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

#### **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).

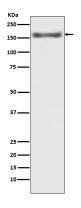
**Cellular Location** 

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.

## **Images**



Western blot analysis of ASK1 expression in HeLa cell lysates.

Image not found: 202311/AP90384-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human breast cancer, using ASK1 Antibody.

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