

# Anti-ASK1 Antibody

Rabbit polyclonal antibody to ASK1 Catalog # AP59621

#### Specification

# Anti-ASK1 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB <u>O99683</u> <u>O35099</u> Human, Mouse, Rat, Bovine Rabbit Polyclonal 154537

### **Anti-ASK1 Antibody - Additional Information**

Gene ID 4217

**Other Names** ASK1; MAPKKK5; MEKK5; Mitogen-activated protein kinase kinase kinase 5; Apoptosis signal-regulating kinase 1; ASK-1; MAPK/ERK kinase kinase 5; MEK kinase 5; MEKK 5

**Target/Specificity** Recognizes endogenous levels of ASK1 protein.

Dilution WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200)

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

# Anti-ASK1 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** 

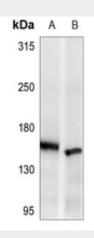
Abundantly expressed in heart and pancreas.

### **Anti-ASK1 Antibody - Protocols**

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

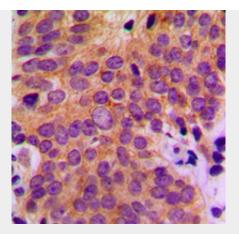
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### Anti-ASK1 Antibody - Images



Western blot analysis of ASK1 expression in H9C2 (A), PC3 (B) whole cell lysates.





Immunohistochemical analysis of ASK1 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

# Anti-ASK1 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human ASK1. The exact sequence is proprietary.