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**Product Name: ASK 1 Rabbit Polyclonal Antibody****Catalog #: APRab07220**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ICC/IF,ELISA
<b>Reactivity</b>	Human,Rat,Mouse
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

**Dilution Ratio** WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000

**Molecular Weight**

**Antigen Information**

<b>Gene Name</b>	MAP3K5 MAP3K5; ASK1; MAPKKK5; MEKK5; Mitogen-activated protein kinase kinase kinase 5;
<b>Alternative Names</b>	Apoptosis signal-regulating kinase 1; ASK-1; MAPK/ERK kinase kinase 5; MEK kinase 5; MEKK 5
<b>Gene ID</b>	4217.0
<b>SwissProt ID</b>	Q99683
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human ASK1. AA range:49-98

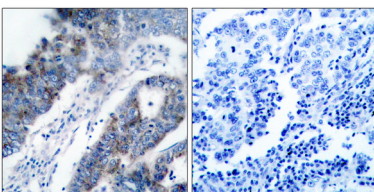
## Background

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. The kinases of these signaling cascades are highly conserved, and homologs exist in yeast, Drosophila, and mammalian cells. MAPKKK5 contains 1,374 amino acids with all 11 kinase subdomains. Northern blot analysis shows that MAPKKK5 transcript is abundantly expressed in human heart and pancreas. The MAPKKK5 protein phosphorylates and activates MKK4 (aliases SERK1, MAPKK4) in vitro, and activates c-Jun N-terminal kinase (JNK)/stress-activated protein kinase (SAPK) during transient expression in COS and 293 cells; MAPKKK5 does not activate MAPK/ERK. [provided by Recatalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,enzyme regulation:Contains an N-terminal autoinhibitory domain. Activated by phosphorylation at Thr-838, inhibited by phosphorylation at Ser-966 and Ser-1033. Binds to, and stabilizes MAP3K6 and is activated by MAP3K6 by phosphorylation on Thr-838.,function:Component of a protein kinase signal transduction cascade. Phosphorylates and activates MAP2K4 and MAP2K6, which in turn activate the JNK and p38 MAP kinases, respectively. Overexpression induces apoptotic cell death.,induction:By TNF-alpha. Inhibited by HIV-1 Nef.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase kinase subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Homodimer when inactive. Binds both upstream activators and downstream substrates in multimolecular complexes. Associates with and inhibited by HIV-1 Nef. Interacts with DAB2IP and PPM1L.,tissue specificity:Abundantly expressed in heart and pancreas.,

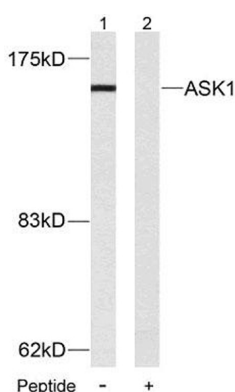
## Research Area

SAPK\_JNK; Regulation of Actin Dynamics; Cell Growth; Stem cell pathway; Cell\_Cycle\_G1S;Cell\_Cycle\_G2M\_DNA; MAPK\_ERK\_Growth;MAPK\_G\_Protein; B Cell Receptor

## Image Data

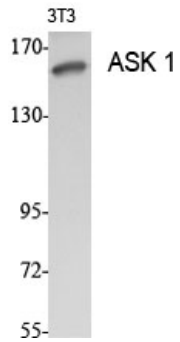


Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using ASK1 Antibody. The picture on the right is blocked with the synthesized peptide.

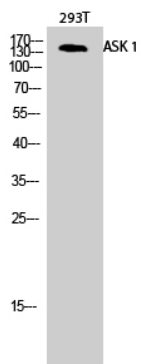


Western blot analysis of lysates from MDA-MB-435 cells, using ASK1 Antibody. The lane on the right is blocked with the synthesized peptide.

(kD)



Western Blot analysis of various cells using ASK 1 Polyclonal Antibody diluted at 1 : 1000



Western Blot analysis of 293T cells using ASK 1 Polyclonal Antibody diluted at 1 : 1000