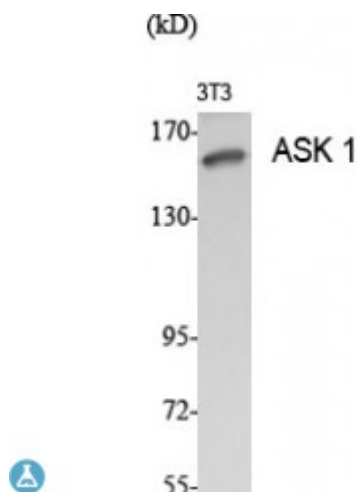


## Anti-ASK 1 antibody



<b>Description</b>	Rabbit polyclonal to ASK 1.
<b>Model</b>	STJ91736
<b>Host</b>	Rabbit
<b>Reactivity</b>	Human
<b>Applications</b>	ELISA, IHC, WB
<b>Immunogen</b>	Synthesized peptide derived from human ASK 1 around the non-phosphorylation site of S83.
<b>Immunogen Region</b>	20-100 aa
<b>Gene ID</b>	<a href="#">4217</a>
<b>Gene Symbol</b>	<a href="#">MAP3K5</a>
<b>Dilution range</b>	WB 1:500-1:2000IHC 1:100-1:300ELISA 1:20000
<b>Specificity</b>	ASK 1 Polyclonal Antibody detects endogenous levels of ASK 1 protein.
<b>Tissue Specificity</b>	Abundantly expressed in heart and pancreas.
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Note</b>	For Research Use Only (RUO).
<b>Protein Name</b>	Mitogen-activated protein kinase kinase kinase 5 Apoptosis signal-regulating kinase 1 ASK-1 MAPK/ERK kinase kinase 5 MEK kinase 5 MEKK 5
<b>Molecular Weight</b>	155 kDa
<b>Clonality</b>	Polyclonal

<b>Conjugation</b>	Unconjugated
<b>Isotype</b>	IgG
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Concentration</b>	1 mg/ml
<b>Storage Instruction</b>	Store at -20°C, and avoid repeat freeze-thaw cycles.
<b>Database Links</b>	<a href="#">HGNC:6857OMIM:602448</a>
<b>Alternative Names</b>	Mitogen-activated protein kinase kinase kinase 5 Apoptosis signal-regulating kinase 1 ASK-1 MAPK/ERK kinase kinase 5 MEK kinase 5 MEKK 5
<b>Function</b>	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).
<b>Cellular Localization</b>	Cytoplasm. Endoplasmic reticulum. Interaction with 14-3-3 proteins alters the distribution of MAP3K5/ASK1 and restricts it to the perinuclear endoplasmic reticulum region.
<b>Post-translational Modifications</b>	Phosphorylated at Thr-838 through autophosphorylation and by MAP3K6/ASK2 which leads to activation. Thr-838 is dephosphorylated by PPP5C. Ser-83 and Ser-1033 are inactivating phosphorylation sites, the former of which is phosphorylated by AKT1 and AKT2. Phosphorylated at Ser-966 which induces association of MAP3K5/ASK1 with the 14-3-3 family proteins and suppresses MAP3K5/ASK1 activity. Calcineurin (CN) dephosphorylates this site. Also dephosphorylated and activated by PGAM5. Ubiquitinated. Tumor necrosis factor (TNF) induces TNFR2-dependent ubiquitination leading to proteasomal degradation.