Datasheet for ABIN95283

anti-ASK1 antibody (pSer83)

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Overview

Quantity:	200 µg
Target:	ASK1 (MAP3K5)
Binding Specificity:	pSer83
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ASK1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Purpose:	ASK1 phospho S83 Antibody
Immunogen:	Immunogen: This purified antibody was prepared from rabbit serum after repeated immunizations with a KLH conjugated peptide corresponding to an internal region near amino acids 75-100 of human ASK-1 protein. Immunogen Type: Conjugated Peptide
Isotype:	IgG
Cross-Reactivity (Details):	Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum.
Characteristics:	Synonyms: rabbit anti-ASK1 pS83 Antibody, Apoptosis signal regulating kinase 1 antibody, ASK 1 antibody, ASK-1 antibody, MAP/ERK kinase kinase 5 antibody, MAP3K5 antibody, MAPK/ERK kinase kinase 5 antibody
Purification:	This product is an IgG fraction antibody purified from antiserum by a multi-step process which

Product Details

	includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above.
Sterility:	Sterile filtered

Target Details

Target:	ASK1 (MAP3K5)
Alternative Name:	MAP3K5 (MAP3K5 Products)
Background:	Background: ASK-1 (apoptosis signal-regulating kinase 1 - also referred to as MEK Kinase-5 or MAPKKK5) is a novel serine/threonine MAP kinase kinase kinase (MAPKKK) component of the mitogen -activated protein (MAP) cascade that is activated in response to extracellular stimuli by cytokines, growth factors and environmental stresses and other factors. Overexpression of ASK-1 induces apoptotic cell death. ASK-1 is expressed in a variety of human and mouse tissues. The overall amino acid sequence identity between the mouse and human ASK1 is 91.9 % . ASK-1 interacts with CDKN1A (also known as p21, WAF1, CIP1). Please refer to the reference list at the end of this document for further information.
Gene ID:	4217
NCBI Accession:	NP_005914
UniProt:	Q99683
Pathways:	MAPK Signaling, Positive Regulation of Endopeptidase Activity, Unfolded Protein Response

Application Details

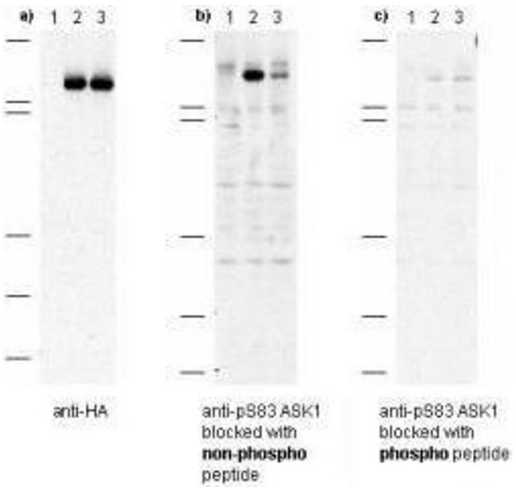
Application Notes:	Application Note: This phospho specific polyclonal antibody reacts human pS83 ASK1 and shows minimal reactivity by western blot, ELISA and competitive ELISA with non-phosphorylated ASK1. Although not tested, this antibody is likely functional in RIA, immunohistochemistry and immunoprecipitation. For immunoblotting a 1:1,000 dilution is recommended. A 155 kDa band corresponding to human ASK-1 is detected. Whole cell lysates from SW1353 can be used as a positive control. For ELISA a 1:5,000 to 1:10,000 dilution is recommended. Researchers should determine optimal titers for other applications. Western Blot Dilution: 1:1,000 ELISA Dilution: 1:5,000 - 1:10,000 Other: User Optimized
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1.0 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: None Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiry Date:	12 months

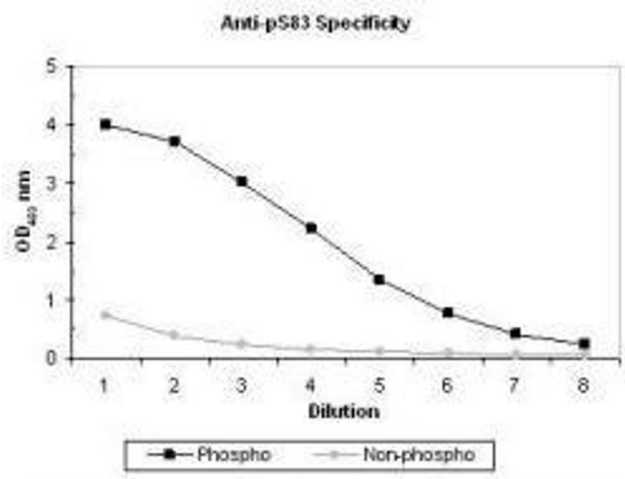
Publications

Product cited in:	Subramanyam, Takahashi, Hasegawa, Mohri, Okada: "Inhibition of protein kinase Akt1 by apoptosis signal-regulating kinase-1 (ASK1) is involved in apoptotic inhibition of regulatory volume increase." in: **The Journal of biological chemistry**, Vol. 285, Issue 9, pp. 6109-17, (2010) (PubMed).



Western Blotting

Image 1. Western blot of anti-pS83 ASK1 antibodies shows specificity for phosphorylated human ASK1. Anti-pS83 (aa 76-87) antibody was tested by western blot against Cos-7 cell lysates after transient transfection with 1) vector only, 2) recombinant HA-ASK1, and 3) recombinant human HA-ASK1 where S83 was substituted with an alanine residue. Cells were lysed 24 h post-transfection in 200 ?L of 1x SDS-sample buffer, heated at 96?C for 5', and vortexed for 30 sec. Samples (10 ?L each) were separated on a 12% SDS-PAGE gel and transferred to PVDF (Millipore) followed by blocking for 45' using TTBS supplemented with 5% non-fat dry milk. All incubations were performed at room temperature. In panel a) all samples were incubated with anti-HA antibody. This blot demonstrates both recombinant transfections express rASK1. In panel b) all samples were incubated with anti-pS83 ASK1. Lane 2 shows strong specific staining of ASK1. Lane 3, where S83 was replaced with alanine, shows greatly diminished staining. In panel c) all samples were incubated with anti-pS83 ASK1 antibody as before except the antibody was pre-incubated with phospho peptide prior to membrane incubation. No staining is observed after phospho peptide blocking occurs.



ELISA

Image 2. ELISA results of purified polyclonal anti-pS83 ASK-1 (aa 76-87) antibody tested against BSA conjugates of non-phospho and phospho forms of immunizing peptide. Each well was coated with 0.1 mg of conjugate. The starting dilution of antibody was 1:1,000 and each point on the X-axis represents a 2-fold dilution. HRP conjugated Gt-a-Rabbit IgG H&L and TMB substrate were used for detection.