Order online now!

www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 600-401-281

MAPKAP Kinase 2 Antibody

Overview

Description:	Anti-MAPKAP Kinase 2 (RABBIT) Antibody - 600-401-281
Item No.:	600-401-281
Size:	100 µg
Applications:	WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	MAPKAP kinase-2 (or MK2) is an acronym for mitogen-activated protein kinase-activated protein kinase-2. This enzyme is phosphorylated and activated by Erks and p38 MAPK in vitro. While multiple residues of MK2 are phosphorylated in vivo in response to stress, only four of the residues Thr25, Thr222, Ser272 and Thr334 are phosphorylated by p38 in an in vitro kinase assay. MK2 is serine-threonine protein kinase that contains a proline rich sequence and two putative SH3-binding sites. MK2 phosphorylates downstream components on a consensus Pro-X-Ser/Thr-Pro motif. The best-characterized MK2 substrate is hsp27. Although unknown, the physiological function of MK2 may be to increase stress resistance. MK2 is an essential component in the inflammatory response that regulates biosynthesis of TNFα at a post-transcriptional level and MK2 is rapidly phosphorylated and activated in response to cytokines, stress and chemotactic factors.
Synonyms:	rabbit anti-MAPKAP kinase 2 antibody, MAP kinase-activated protein kinase 2, MAPK-activated protein kinase 2, MAPKAP kinase-2, MK2, mitogen-activated protein kinase-activated protein kinase-2, MAPKAP-K2, MAPKAPK-2, MK-2, MK2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	MAPKAPK2
Reactivity:	Human

Immunogen Type:	Conjugated Peptide
Immunogen:	This antibody was affinity purified from whole rabbit serum prepared by repeated immunizations with a synthetic peptide corresponding to an internal region of rabbit MAPKAP Kinase 2 conjugated to KLH using maleimide. A terminal cysteine residue was added to facilitate coupling.
Purity/Specificity:	This affinity-purified antibody is directed against rabbit MAPKAP Kinase 2 and is useful in determining its presence in various assays. This polyclonal anti-MAPKAP Kinase 2 antibody recognizes native and over-expressed protein found in various tissues and extracts. This sequence is conserved 100% in human, mouse, rabbit, rat, hamster, chicken, Xenopus and zebrafish. Cross reactivity with MAPKAP Kinase 2 from other sources has not been tested.
Relevant Links:	• UniProtKB - P49137 • NCBI - P49137.1 • GeneID - 9261

Application Details

Tested Applications:	WB
Application Note:	Anti-MAPKAP kinase 2 antibody is tested by western blotting and suitable for ELISA, immunoprecipitation and kinase assays. Although not tested, this antibody is likely functional in immunohistochemistry and other immunological methods. The antibody detects a single 44 kDa protein in crude extracts prepared either from unstimulated (p/n w09-000-364) or TNFα stimulated ((p/n w09-000-367) human HeLa cell lysates. A 1:15,000 dilution is recommended for ELISA. The researcher should determine optimal titers for other applications.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:15,000
IHC:	User Optimized
IP:	User Optimized
WB:	1:2,000

Formulation

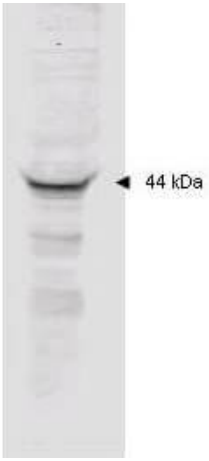
Physical State:	Liquid (sterile filtered)
Concentration:	0.9 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide

Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	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.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot
Affinity purified anti-MAPKAP Kinase 2 polyclonal antibody detects MK2 in unstimulated human HeLa whole cell lysate by western blot. Polyclonal rabbit-anti-MAPKAP Kinase 2 used at a 1:2000 dilution to detect 20 ug of whole cell lysate containing MK2. This antibody detects a single 44 kDa protein as indicated in crude extracts prepared from unstimulated human HeLa cell lysates. A 4-20% gradient gel was used to separate the protein by SDS-PAGE. The protein was transferred to nitrocellulose using standard methods. After blocking the membrane was probed with the primary antibody for 1 h at room temperature followed by washes and reaction with a 1:5,000 dilution of IRDye™800 conjugated Gt-a-Rabbit IgG [H&L] (code 611-132-122) for 30 min at room temperature. LICOR's Odyssey® Infrared Imaging System was used to scan and process the image. Other detection systems will yield similar results.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.