

**Datasheet for 600-401-281****MAPKAP Kinase 2 Antibody****Overview**

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

**Product Details**

<b>Background:</b>	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 TNF $\alpha$ at a post-transcriptional level and MK2 is rapidly phosphorylated and activated in response to cytokines, stress and chemotactic factors.
<b>Synonyms:</b>	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
<b>Host Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>Format:</b>	IgG

**Target Details**

<b>Gene Name:</b>	MAPKAPK2
<b>Reactivity:</b>	Human

<b>Immunogen Type:</b>	Conjugated Peptide
<b>Immunogen:</b>	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.
<b>Purity/Specificity:</b>	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.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li>• <a href="#">UniProtKB - P49137</a></li><li>• <a href="#">NCBI - P49137.1</a></li><li>• <a href="#">GenelD - 9261</a></li></ul>

## Application Details

<b>Tested Applications:</b>	WB
<b>Application Note:</b>	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 TNF $\alpha$ 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.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>ELISA:</b>	1:15,000
<b>IHC:</b>	User Optimized
<b>IP:</b>	User Optimized
<b>WB:</b>	1:2,000

## Formulation

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

**Stabilizer:** None

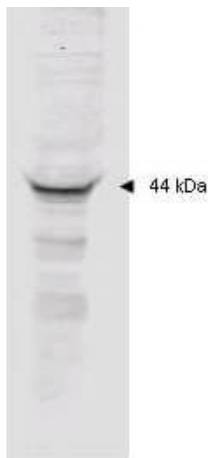
## Shipping & Handling

**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

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