

## Product datasheet

# Recombinant human MK2 protein ab60307

[1 References](#) [4 Images](#)

### Description

---

<b>Product name</b>	Recombinant human MK2 protein
<b>Biological activity</b>	Specific activity: 254 nmol/min/mg.
<b>Purity</b>	> 90 % Densitometry. Affinity purified.
<b>Expression system</b>	Baculovirus infected Sf9 cells
<b>Accession</b>	<b><u>P49137-1</u></b>
<b>Protein length</b>	Protein fragment
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human
<b>Predicted molecular weight</b>	68 kDa
<b>Amino acids</b>	46 to 400
<b>Tags</b>	GST tag N-Terminus
<b>Additional sequence information</b>	Recombinant fragment, corresponding to amino acids 46-end of Human MAPKAP Kinase 2.

### Specifications

---

Our **Abpromise guarantee** covers the use of **ab60307** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Applications</b>	Functional Studies SDS-PAGE
<b>Form</b>	Liquid
<b>Additional notes</b>	<b><u>ab204861</u></b> (Hsp27 peptide) can be utilized as a substrate for assessing kinase activity This product was previously labelled as MAPKAP Kinase 2

### Preparation and Storage

---

**Stability and Storage** Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 7.50

Constituents: 0.0038% EGTA, 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCl, 0.00292% EDTA, 25% Glycerol (glycerin, glycerine), 0.87% Sodium chloride

This product is an active protein and may elicit a biological response in vivo, handle with caution.

## General Info

---

### Function

Its physiological substrate seems to be the small heat shock protein (HSP27/HSP25). In vitro can phosphorylate glycogen synthase at 'Ser-7' and tyrosine hydroxylase (on 'Ser-19' and 'Ser-40'). This kinase phosphorylates Ser in the peptide sequence, Hyd-X-R-X(2)-S, where Hyd is a large hydrophobic residue (By similarity). Mediates both ERK and p38 MAPK/MAPK14 dependent neutrophil responses. Participates in TNF alpha-stimulated exocytosis of secretory vesicles in neutrophils. Plays a role in phagocytosis-induced respiratory burst activity.

### Tissue specificity

Expressed in all tissues examined.

### Sequence similarities

Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. Contains 1 protein kinase domain.

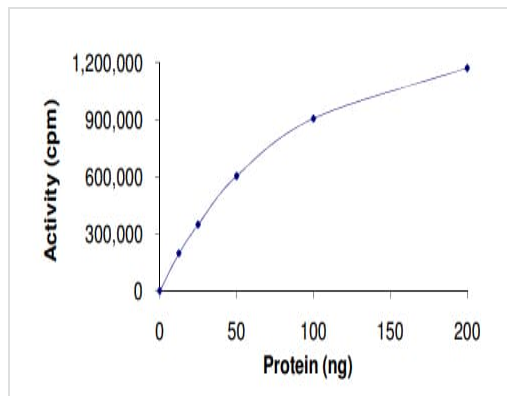
### Post-translational modifications

Phosphorylated and activated by MAP kinase.

---

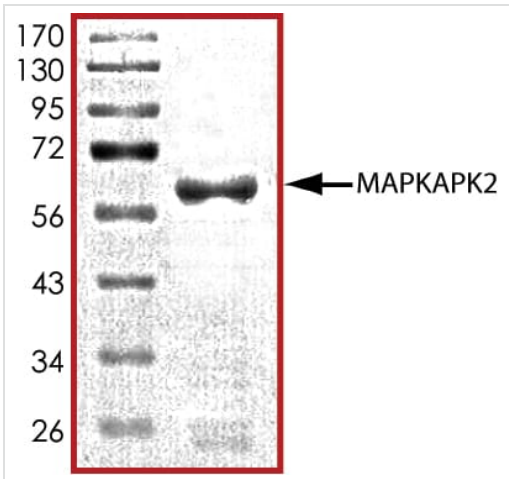
## Images

---



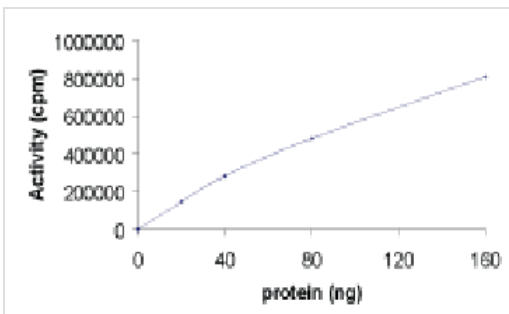
The specific activity of MK2 (ab60307) was determined to be 315 nmol/min/mg as per activity assay protocol

Functional Studies - Recombinant human MK2 protein (ab60307)



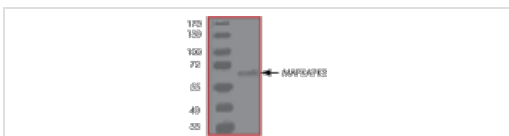
SDS PAGE analysis of ab60307

SDS-PAGE - Recombinant human MK2 protein (ab60307)



Sample Kinase Activity Plot.

Functional Studies - Recombinant human MK2 protein (ab60307)



ab60307 on SDS-PAGE.

SDS-PAGE - Recombinant human MK2 protein (ab60307)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

## **Our Abpromise to you: Quality guaranteed and expert technical support**

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
  
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

## **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors