



## Product datasheet

### Anti-MK2 (phospho T334) antibody ab63378

★★★★★ [1 Abreviews](#) [6 References](#) [3 Images](#)

#### Overview

<b>Product name</b>	Anti-MK2 (phospho T334) antibody
<b>Description</b>	Rabbit polyclonal to MK2 (phospho T334)
<b>Host species</b>	Rabbit
<b>Specificity</b>	Detects endogenous levels of MK2 only when phosphorylated at threonine 334 (human) and threonine 320 (mouse and rat). The immunogen sequence used to produce ab63378 is 90% identical to the corresponding region of MK3, therefore ab63378 may cross react with human MK3 but this has not been confirmed.
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	Synthetic peptide corresponding to Human MK2 aa 300-400 (phospho T334). Database link: <a href="#">P49137</a>
	 <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a>
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.87% Sodium chloride
	Without Mg2+ and Ca2+
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	The antibody was affinity-purified from rabbit antiserum by affinity chromatography using epitope-

specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.

**Clonality**

Polyclonal

**Isotype**

IgG

**Applications****The Abpromise guarantee**

Our **Abpromise guarantee** covers the use of ab63378 in the following tested applications.

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

Application	Abreviews	Notes
ICC/IF		Use a concentration of 1 µg/ml.
WB	★ ★ ★ ★ ★ (1)	1/500 - 1/1000. Detects a band of approximately 46 kDa (predicted molecular weight: 46 kDa).
IHC-P		1/50 - 1/100.

**Target****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.

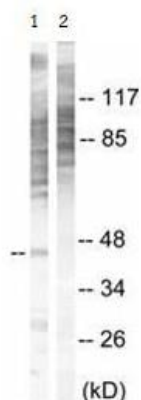
**Sequence similarities**

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**



Western blot - Anti-MK2 (phospho T334) antibody (ab63378)

**All lanes :** Anti-MK2 (phospho T334) antibody (ab63378) at 1/500 dilution

**Lane 1 :** NIH/3T3 cell extract

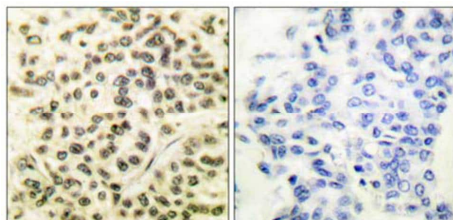
**Lane 2 :** NIH/3T3 cell extract with immunising phosphopeptide at 10 µg

Lysates/proteins at 30 µg per lane.

**Predicted band size:** 46 kDa

**Observed band size:** 46 kDa

**Additional bands at:** 28 kDa. We are unsure as to the identity of these extra bands.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MK2 (phospho T334) antibody (ab63378)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue labelled with ab63378 at 1/50 dilution. Right hand panel was treated with immunising phosphopeptide.

Immunocytochemistry/ Immunofluorescence - Anti-MK2 (phospho T334) antibody (ab63378)

ICC/IF image of ab63378 stained HeLa cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab63378, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used

to stain the cell nuclei (blue) at a concentration of 1.43µM.

**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