# abcam

## Product datasheet

## Anti-p38 beta/MAPK11 + p38 alpha/MAPK14 antibody [Y122] ab32142





## 42 References 9 Images

#### Overview

**Product name** Anti-p38 beta/MAPK11 + p38 alpha/MAPK14 antibody [Y122]

**Description** Rabbit monoclonal [Y122] to p38 beta/MAPK11 + p38 alpha/MAPK14

**Host species** Rabbit

Specificity This antibody recognises p38. It is predicted to react with splice isoform CSBP1 according to

sequence homology. Mouse cross reactivity has been tested by WB and IHC, Rat cross reactivity

by WB only.

**Tested applications** Suitable for: ICC/IF, WB, IHC-P

Unsuitable for: Flow Cyt or IP

Species reactivity Reacts with: Mouse. Human

Predicted to work with: Rat

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: Hela, Jurkat, HEK-293T, K562 and MCF7 cell lyastes. IHC-P: Human skin carcinoma.

ICC/IF: MCF7 cells.

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

#### **Properties**

**Form** Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA

**Clonality** Monoclonal

Clone number Y122 Isotype IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab32142 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		1/100 - 1/250.
WB		1/1000 - 1/10000. Detects a band of approximately 42 kDa (predicted molecular weight: 41 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

**Application notes** 

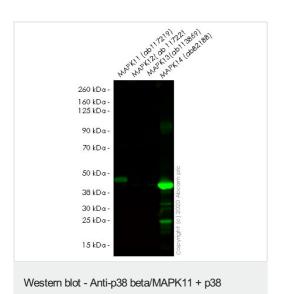
Is unsuitable for Flow Cyt or IP.

### **Target**

Cellular localization

p38 alpha/MAPK14: Cytoplasm. Nucleus.

## **Images**



alpha/MAPK14 antibody [Y122] (ab32142)

**All lanes :** Anti-p38 beta/MAPK11 + p38 alpha/MAPK14 antibody

[Y122] (ab32142) at 1/1000 dilution

Lane 1: MAPK11 recombinant (ab117219)

Lane 2 : MAPK12 recombinant (ab117221)

Lane 3: MAPK13 recombinant (ab113869)

Lane 4: MAPK14 (p38) recombinant (ab82188)

Lysates/proteins at 0.5 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 41 kDa **Observed band size:** 43 kDa

Lanes 1 - 4: Green - ab32142 observed at 43 kDa.

ab32142 was shown to react with Anti-p38 antibody [Y122] in Western blot. Membranes were blocked in 100% Licor before incubation with ab32142 and overnight at 4 °C at a 1 in 1000 dilution. Blots were incubated with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preabsorbed (ab216773) secondary antibody at 1 in 20000 dilution for 1 h at room temperature before imaging.

1 2 3 4

260 KDa160 KDa125 kDa90 kDa70 kDa30 kDa30 kDa25 kDa15 kDa-

Western blot - Anti-p38 beta/MAPK11 + p38 alpha/MAPK14 antibody [Y122] (ab32142)

**All lanes :** Anti-p38 beta/MAPK11 + p38 alpha/MAPK14 antibody [Y122] (ab32142) at 1/1000 dilution

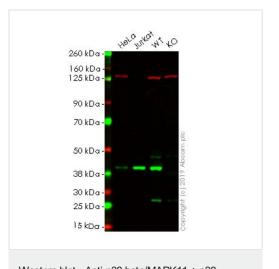
**Lane 1 :** Recombinant Human p38 beta/MAPK11 protein (ab117219)

**Lane 2 :** Recombinant Human p38 gamma/MAPK12 protein (ab117221)

**Lane 3 :** Recombinant Human p38 delta/MAPK13 protein (ab113869)

**Lane 4 :** Recombinant Human p38 alpha/MAPK14 protein (ab82188)

Predicted band size: 41 kDa



Western blot - Anti-p38 beta/MAPK11 + p38 alpha/MAPK14 antibody [Y122] (ab32142)

**All lanes :** Anti-p38 beta/MAPK11 + p38 alpha/MAPK14 antibody [Y122] (ab32142) at 1/1000 dilution

Lane 1 : HeLa cell lysate

Lane 2: Jurkat cell lysate

Lane 3: Wild-type HEK-293T cell lysate

Lane 4: MAPK14 knockout HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

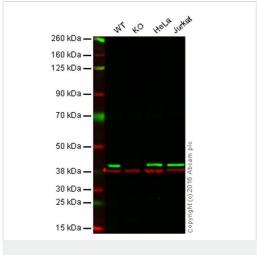
Performed under reducing conditions.

Predicted band size: 41 kDa

**Lanes 1 - 4:** Merged signal (red and green). Green - ab32142 observed at 40 kDa. Red - loading control, <u>ab130007</u> observed at 125 kDa.

ab32142 was shown to react with p38 in wild-type HEK-293T cells.

Loss of signal was observed when knockout cell line <a href="mailto:ab255406">ab255406</a> (knockout cell lysate <a href="mailto:ab263787">ab263787</a>) was used. Wild-type and p38 knockout samples were subjected to SDS-PAGE. ab32142 and Anti-Vinculin antibody [VIN-54] (<a href="mailto:ab130007">ab130007</a>) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (<a href="mailto:ab216773">ab216773</a>) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (<a href="mailto:ab216776">ab216776</a>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-p38 beta/MAPK11 + p38 alpha/MAPK14 antibody [Y122] (ab32142)

**All lanes**: Anti-p38 beta/MAPK11 + p38 alpha/MAPK14 antibody [Y122] (ab32142)

Lane 1: Wild-type HAP1 cell lysate

Lane 2: p38 knockout HAP1 cell lysate

Lane 3 : HeLa cell lysate

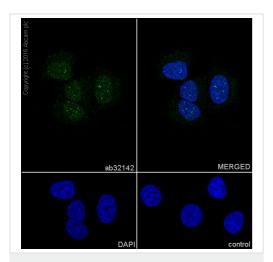
Lane 4 : Jurkat cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 41 kDa

**Lanes 1 - 4**: Merged signal (red and green). Green - ab32142 observed at 40 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

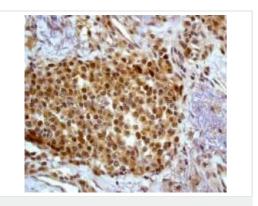
ab32142 was shown to specifically react with p38 when p38 knockout samples were used. Wild-type and p38 knockout samples were subjected to SDS-PAGE. ab32142 and <u>ab8245</u> (loading control to GAPDH) were diluted 1/1000 and 1/2000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1/10 000 dilution for 1 h at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Antip38 beta/MAPK11 + p38 alpha/MAPK14 antibody [Y122] (ab32142)

Immunocytochemistry/Immunofluorescence analysis of MCF-7 (human breast carcinoma) cells labelling p38 (green) with purified ab32142 at 1/250. Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% Triton X-100. <a href="mailto:ab150077">ab150077</a>, Alexa Fluor<sup>®</sup> 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. Nuclei were counterstained with DAPI (blue).

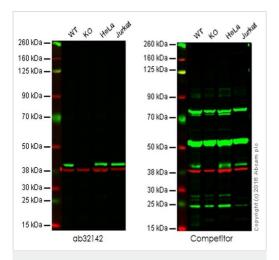
Secondary Only Control: PBS was used instead of the primary antibody as the negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-p38 beta/MAPK11 + p38 alpha/MAPK14 antibody [Y122] (ab32142)

Ab32142, at a 1/100 dilution, staining p38 in paraffin embedded human skin carcinoma tissue by immunohistochemistry.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-p38 beta/MAPK11 + p38 alpha/MAPK14 antibody [Y122] (ab32142)

**All lanes :** Anti-p38 beta/MAPK11 + p38 alpha/MAPK14 antibody [Y122] (ab32142)

Lane 1 : Wild-type HAP1 cell lysate

Lane 2: p38 knockout HAP1 cell lysate

Lane 3 : HeLa cell lysate

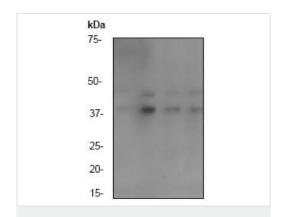
Lane 4 : Jurkat cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 41 kDa

**Lanes 1 - 4**: Merged signal (red and green). Green - ab32142 observed at 40 kDa. Red - loading control, <u>ab8245</u>, observed at 37 kDa.

This western blot image is a comparison between ab32142 and a competitor's top cited rabbit polyclonal antibody.



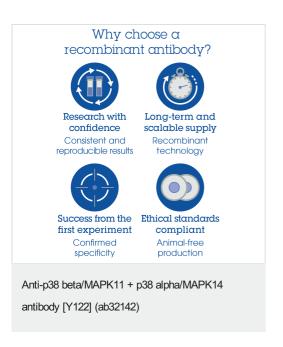
Western blot - Anti-p38 beta/MAPK11 + p38 alpha/MAPK14 antibody [Y122] (ab32142)

**All lanes :** Anti-p38 beta/MAPK11 + p38 alpha/MAPK14 antibody [Y122] (ab32142) at 1/50000 dilution

Lane 1 : Hela cell lysate
Lane 2 : Jurkat cell lysate
Lane 3 : K562 cell lysate
Lane 4 : MCF7 cell lysate

**Predicted band size:** 41 kDa **Observed band size:** 42 kDa

10 ug protein per lane



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

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