

Product datasheet

Anti-MAPK 12 antibody [EPR6528(N)] α b205926

KO VALIDATED Recombinant RabMAb

[1 References](#) [6 Images](#)

Overview

Product name	Anti-MAPK 12 antibody [EPR6528(N)]
Description	Rabbit monoclonal [EPR6528(N)] to MAPK 12
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Rat, Human
Immunogen	Synthetic peptide within Human MAPK 12 aa 50-150. The exact sequence is proprietary. Database link: P53778
Positive control	WB: Human skeletal muscle lysate; HeLa, K562, C6 and PC-12 whole cell lysates; Rat heart, spleen and muscle lysates. ICC/IF: A673 and K562 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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal

Clone number EPR6528(N)
Isotype IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab205926** in the following tested applications.

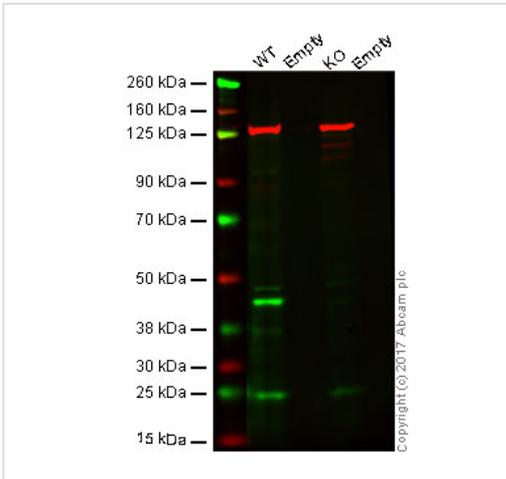
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000. Detects a band of approximately 42 kDa (predicted molecular weight: 42 kDa).
ICC/IF		1/500.

Target

Function	Responds to activation by environmental stress and pro-inflammatory cytokines by phosphorylating downstream targets. Plays a role in myoblast differentiation and also in the down-regulation of cyclin D1 in response to hypoxia in adrenal cells suggesting MAPK12 may inhibit cell proliferation while promoting differentiation.
Tissue specificity	Highly expressed in skeletal muscle and heart.
Sequence similarities	Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily. Contains 1 protein kinase domain.
Domain	The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases.
Post-translational modifications	Dually phosphorylated on Thr-183 and Tyr-185, which activates the enzyme.
Cellular localization	Cytoplasm. Mitochondrion. Mitochondrial when associated with SH3BP5.

Images



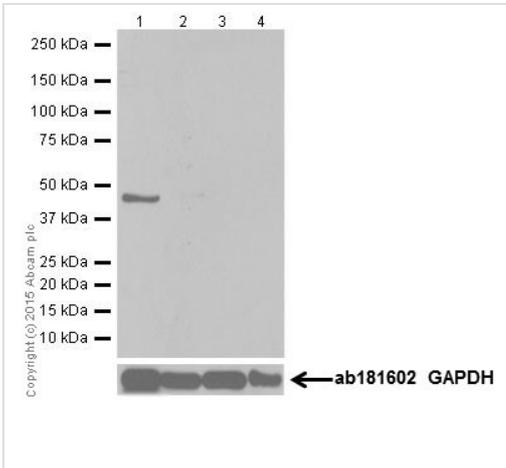
Western blot - Anti-MAPK 12 antibody
[EPR6528(N)] (ab205926)

Lane 1: Wild type HAP1 whole cell lysate (0 µg)

Lane 2: empty knockout HAP1 whole cell lysate (20 µg)

Lane 3: MAPK 12 whole cell lysate (0 µg)

Lanes 1 - 3: Merged signal (red and green). Green - ab205926 observed at 45 kDa. Red - loading control, ab18058, observed at 124 kDa.



Western blot - Anti-MAPK 12 antibody
[EPR6528(N)] (ab205926)

All lanes : Anti-MAPK 12 antibody [EPR6528(N)] (ab205926) at 1/10000 dilution

Lane 1 : Human skeletal muscle lysate

Lane 2 : Human fetal kidney lysate

Lane 3 : Human fetal liver lysate

Lane 4 : Human fetal skin lysate

Lysates/proteins at 20 µg per lane.

Secondary

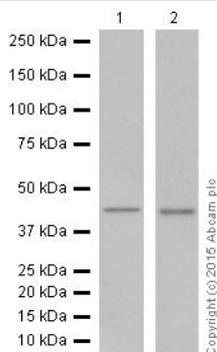
All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 42 kDa

Observed band size: 42 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDm/TBST.



Western blot - Anti-MAPK 12 antibody [EPR6528(N)] (ab205926)

All lanes : Anti-MAPK 12 antibody [EPR6528(N)] (ab205926) at 1/1000 dilution

Lane 1 : HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate

Lane 2 : K562 (Human chronic myelogenous leukemia cells from bone marrow) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

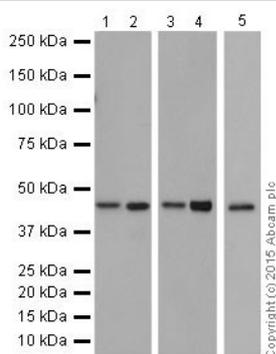
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/10000 dilution

Predicted band size: 42 kDa

Observed band size: 42 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFD/MTBST.



Western blot - Anti-MAPK 12 antibody [EPR6528(N)] (ab205926)

All lanes : Anti-MAPK 12 antibody [EPR6528(N)] (ab205926) at 1/1000 dilution

Lane 1 : Rat heart lysate

Lane 2 : Rat spleen lysate

Lane 3 : C6 (Rat glial tumor cells) whole cell lysate

Lane 4 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysate

Lane 5 : Rat muscle lysate

Lysates/proteins at 10 µg per lane.

Secondary

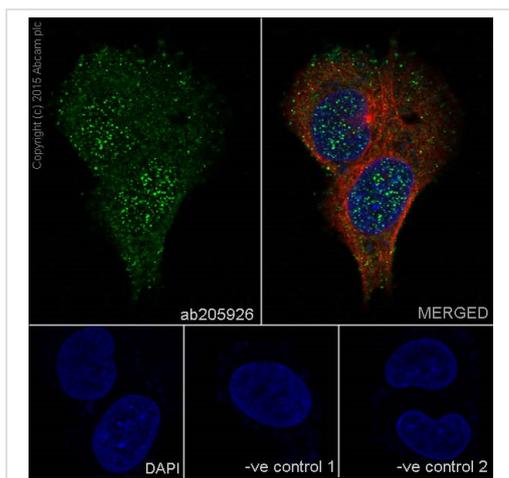
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/10000 dilution

Predicted band size: 42 kDa

Observed band size: 42 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: Lane 1 and 2: 3 minutes; Lane 3 and 4: 1 minute; Lane 5: 30 seconds



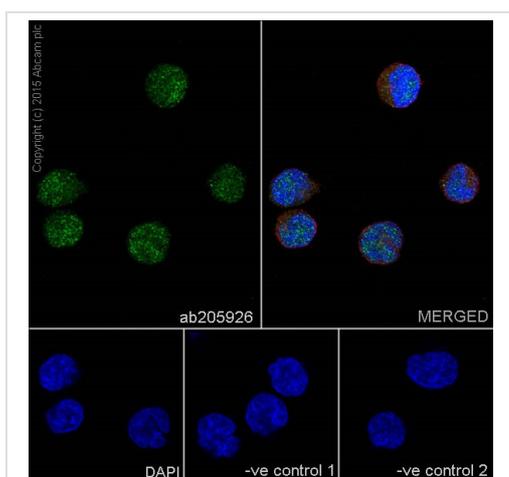
Immunocytochemistry/ Immunofluorescence - Anti-MAPK 12 antibody [EPR6528(N)] (ab205926)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized A673 (Human muscle Ewing's Sarcoma cell line) cells labeling MAPK 12 with ab205926 at 1/500 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing nuclear and cytoplasmic staining on A673 cell line. The nuclear counterstain is DAPI (blue). Tubulin is detected with ab7291 (anti-Tubulin mouse mAb) at 1/1000 dilution and ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution (red).

The negative controls are as follows:-

-ve control 1: ab205926 at 1/500 dilution followed by ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution.

-ve control 2: ab7291 (anti-Tubulin mouse mAb) at 1/1000 dilution followed by ab150077 (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/1000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-MAPK 12 antibody [EPR6528(N)] (ab205926)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized K562 (Human chronic myelogenous leukemia cells from bone marrow) cells labeling MAPK 12 with ab205926 at 1/500 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing nuclear and cytoplasmic staining on K562 cell line. The nuclear counterstain is DAPI (blue). Tubulin is detected with ab7291 (anti-Tubulin mouse mAb) at 1/1000 dilution and ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution (red).

The negative controls are as follows:-

-ve control 1: ab205926 at 1/500 dilution followed by ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution.

-ve control 2: ab7291 (anti-Tubulin mouse mAb) at 1/1000 dilution followed by ab150077 (Alexa Fluor®488 Goat Anti-Rabbit IgG

H&L) at 1/1000 dilution.

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