abcam

ab240082

Anti-Methionine Aminopeptidase 2/p67 antibody [EPR6887] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR6887
Purification technique	Affinity purification Protein A
Dissociation constant	4.3×10^{-11} M
Concentration	0.96 - 1.005 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human

Dilution info	-
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Mouse
Dilution info	-
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Rat
Dilution info	-
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	ab199376 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Tested

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information METAP2

Function	Cotranslationally removes the N-terminal methionine from nascent proteins. The N-terminal methionine is often cleaved when the second residue in the primary sequence is small and uncharged (Met-Ala-, Cys, Gly, Pro, Ser, Thr, or Val). The catalytic activity of human METAP2 toward Met-Val peptides is consistently two orders of magnitude higher than that of METAP1, suggesting that it is responsible for processing proteins containing N-terminal Met-Val and Met-Thr sequences in vivo. Protects eukaryotic initiation factor EIF2S1 from translation-inhibiting phosphorylation by inhibitory kinases such as EIF2AK2/PKR and EIF2AK1/HCR. Plays a critical role in the regulation of protein synthesis.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab240082 is the carrier-free version of ab134124.

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

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

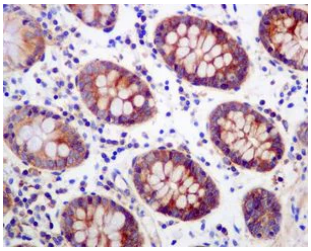
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

13 product images

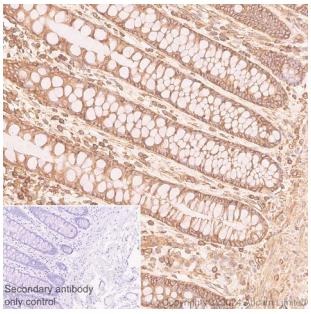


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Methionine Aminopeptidase 2/p67 antibody [EPR6887] - BSA and Azide free (ab240082)

Methionine Aminopeptidase 2/p67 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Methionine Aminopeptidase 2/p67 antibody

Immunohistochemical analysis of paraffin embedded Human colon tissue labelling Methionine Aminopeptidase 2/p67 with ab134124 at 1/250.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab134124).

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Methionine Aminopeptidase 2/p67 antibody [EPR6887] - BSA and Azide free (ab240082)

Methionine Aminopeptidase 2/p67 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human colon tissue using rabbit Anti-Methionine Aminopeptidase 2/p67 antibody

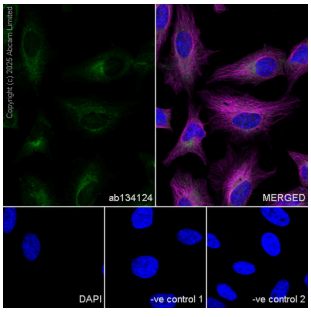
This data was developed using ab134124, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded human colon tissue labeling Methionine Aminopeptidase 2/p67 with ab134124 at 1/1000 (0.986 ug/ml) dilution, followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Positive staining on human colon.

The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.

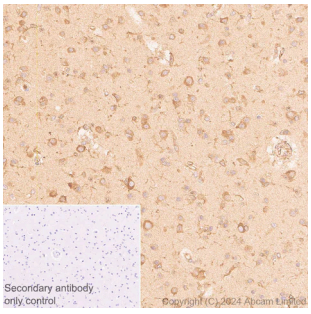


Immunocytochemistry/ Immunofluorescence - Anti-Methionine Aminopeptidase 2/p67 antibody [EPR6887] - BSA and Azide free (ab240082)

Methionine Aminopeptidase 2/p67 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Methionine Aminopeptidase 2/p67 antibody

This image was produced using ab134124, the same clone but in a different formulation.

Immunofluorescent analysis of 4% Paraformaldehyde fixed 0.1% Triton X-100 permeabilized HeLa (human cervical adenocarcinoma epithelial cell) cells labelling Methionine Aminopeptidase 2/p67 with ab134124 at 1/50 (4.62 µg/ml) followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody as secondary at 1/1000 (2 µg/ml) dilution. Confocal image showing cytoplasmic staining in HeLa cell line (shown in green). The counterstain was ab7291 Anti-alpha Tubulin mouse monoclonal antibody used at 1/1000 (1µg/ml) followed by ab150120 Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) as secondary for the counterstain used at 1/1000 (2µg/ml) observed in magenta. Nuclear DNA was labelled with DAPI (shown in blue). Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). Negative control 1: ab134124 with ab150120 as secondary. Negative control 2: ab7291 with ab150081 as secondary.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Methionine Aminopeptidase 2/p67 antibody [EPR6887] - BSA and Azide free (ab240082)

Methionine Aminopeptidase 2/p67 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human cerebrum tissue using rabbit Anti-Methionine Aminopeptidase 2/p67 antibody

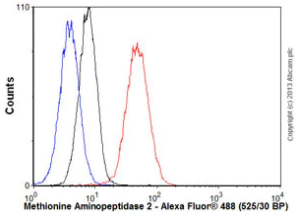
This data was developed using ab134124, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded human cerebrum tissue labeling Methionine Aminopeptidase 2/p67 with ab134124 at 1/1000 (0.986 ug/ml) dilution, followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Positive staining on human cerebrum.

The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

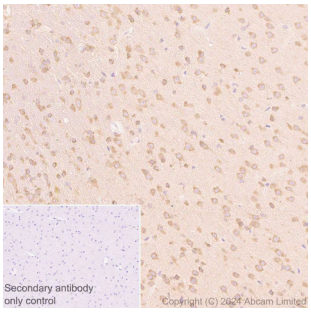
Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Flow Cytometry (Intracellular) - Anti-Methionine Aminopeptidase 2/p67 antibody [EPR6887] - BSA and Azide free (ab240082)

Methionine Aminopeptidase 2/p67 Flow Cytometry (Intracellular) staining using rabbit Anti-Methionine Aminopeptidase 2/p67 antibody

Overlay histogram showing HeLa cells stained with ab134124 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab134124, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab134124).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Methionine Aminopeptidase 2/p67 antibody [EPR6887] - BSA and Azide free (ab240082)

Methionine Aminopeptidase 2/p67 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Rat cerebrum tissue using rabbit Anti-Methionine Aminopeptidase 2/p67 antibody

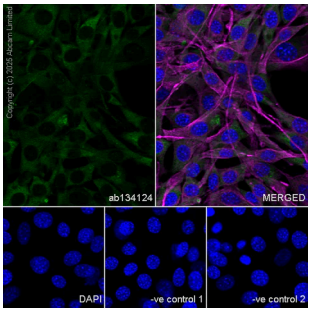
This data was developed using ab134124, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded rat cerebrum tissue labeling Methionine Aminopeptidase 2/p67 with ab134124 at 1/1000 (0.986 ug/ml) dilution, followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Positive staining on rat cerebrum.

The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

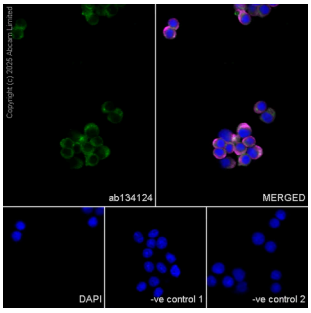
Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunocytochemistry/ Immunofluorescence - Anti-Methionine Aminopeptidase 2/p67 antibody [EPR6887] - BSA and Azide free (ab240082)

Methionine Aminopeptidase 2/p67 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Methionine Aminopeptidase 2/p67 antibody

This image was produced using ab134124, the same clone but in a different formulation. Immunofluorescent analysis of 4% Paraformaldehyde fixed 0.1% Triton X-100 permeabilized NIH/3T3 (mouse embryonic fibroblast) cells labelling Methionine Aminopeptidase 2/p67 with ab134124 at 1/50 (4.62 µg/ml) followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody as secondary at 1/1000 (2 µg/ml) dilution. Confocal image showing cytoplasmic staining in NIH/3T3 cell line (shown in green). The counterstain was ab7291 Anti-alpha Tubulin mouse monoclonal antibody used at 1/1000 (1µg/ml) followed by ab150120 Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) as secondary for the counterstain used at 1/1000 (2µg/ml) observed in magenta. Nuclear DNA was labelled with DAPI (shown in blue). Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). Negative control 1: ab134124 with ab150120 as secondary. Negative control 2: ab7291 with ab150081 as secondary.

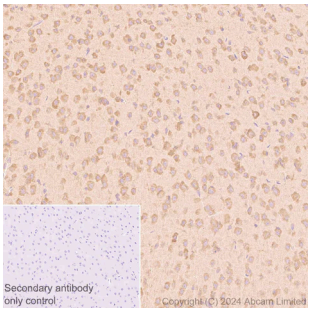


Immunocytochemistry/ Immunofluorescence - Anti-Methionine Aminopeptidase 2/p67 antibody [EPR6887] - BSA and Azide free (ab240082)

Methionine Aminopeptidase 2/p67 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Methionine Aminopeptidase 2/p67 antibody

This image was produced using ab134124, the same clone but in a different formulation. Immunofluorescent analysis of 4% Paraformaldehyde fixed 0.1% Triton X-100 permeabilized PC-12 (rat adrenal gland pheochromocytoma cell) cells labelling Methionine Aminopeptidase 2/p67 with ab134124 at 1/50 (4.62 µg/ml) followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody as secondary at 1/1000 (2 µg/ml) dilution. Confocal image showing

cytoplasmic staining in PC-12 cell line (shown in green). The counterstain was ab7291 Anti-alpha Tubulin mouse monoclonal antibody used at 1/1000 (1µg/ml) followed by ab150120 Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) as secondary for the counterstain used at 1/1000 (2µg/ml) observed in magenta. Nuclear DNA was labelled with DAPI (shown in blue). Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). Negative control 1: ab134124 with ab150120 as secondary. Negative control 2: ab7291 with ab150081 as secondary.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Methionine Aminopeptidase 2/p67 antibody [EPR6887] - BSA and Azide free (ab240082)

Methionine Aminopeptidase 2/p67 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse cerebrum tissue using rabbit Anti-Methionine Aminopeptidase 2/p67 antibody

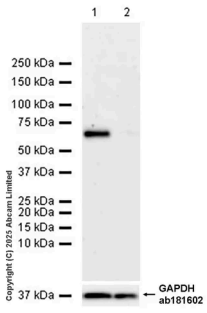
This data was developed using ab134124, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded mouse cerebrum tissue labeling Methionine Aminopeptidase 2/p67 with ab134124 at 1/1000 (0.986 ug/ml) dilution, followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101).

Positive staining on mouse cerebrum.

The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Western blot - Anti-Methionine Aminopeptidase 2/p67 antibody [EPR6887] - BSA and Azide free (ab240082)

Methionine Aminopeptidase 2/p67 Western blot staining using rabbit Anti-Methionine Aminopeptidase 2/p67 antibody

This data was developed using ab134124, the same antibody clone in a different buffer formulation.
Blocking and diluting buffer and concentration: 5% NFDM/TBST.

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/200,000 dilution.

All lanes:
Western blot - Anti-Methionine Aminopeptidase 2/p67 antibody [EPR6887] (ab134124) at 1/1000 dilution

Lane 1:
HeLa (human cervical adenocarcinoma epithelial cell) whole cell lysate at 20 µg

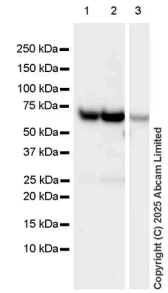
Lane 2:
HeLa transfected with siRNA specifically targeting METAP2 whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Observed band size: 67 kDa, 36 kDa

Exposure time: 132s



Western blot - Anti-Methionine Aminopeptidase 2/p67 antibody [EPR6887] - BSA and Azide free (ab240082)

Methionine Aminopeptidase 2/p67 Western blot staining using rabbit Anti-Methionine Aminopeptidase 2/p67 antibody

This data was developed using ab134124, the same antibody clone in a different buffer formulation.
Blocking and diluting buffer and concentration: 5% NFDM/TBST.

All lanes:
Western blot - Anti-Methionine Aminopeptidase 2/p67 antibody [EPR6887] (ab134124) at 1/1000 dilution

Lane 1:
Mouse brain tissue lysate at 20 µg

Lane 2:
Mouse heart tissue lysate at 20 µg

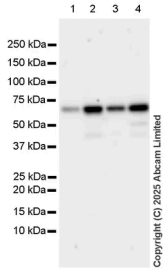
Lane 3:
Mouse spleen tissue lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Observed band size: 67 kDa

Exposure time: 26s



Western blot - Anti-Methionine Aminopeptidase 2/p67 antibody [EPR6887] - BSA and Azide free (ab240082)

Methionine Aminopeptidase 2/p67 Western blot staining using rabbit Anti-Methionine Aminopeptidase 2/p67 antibody

This data was developed using ab134124, the same antibody clone in a different buffer formulation.
Blocking and diluting buffer and concentration: 5% NFDM/TBST.

All lanes:
Western blot - Anti-Methionine Aminopeptidase 2/p67 antibody [EPR6887] (ab134124) at 1/1000 dilution

Lane 1:
C6 (rat glial tumor glial cell) whole cell lysate at 20 µg

Lane 2:
RAW 264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) whole cell lysate at 20 µg

Lane 3:
PC-12 (rat adrenal gland pheochromocytoma cell) whole cell lysate at 20 µg

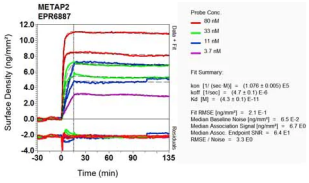
Lane 4:
NIH/3T3 (mouse embryonic fibroblast) whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Observed band size: 67 kDa

Exposure time: 48s



OI-RD Scanning - Anti-Methionine Aminopeptidase 2/p67 antibody [EPR6887] - BSA and Azide free (ab240082)

We have systematically measured KD (the equilibrium dissociation constant between the antibody and its antigen), of more than 840 recombinant antibodies to assess not only their individual KD values but also to see the average affinity of antibody. Based on the comparison with published literature values for mouse monoclonal antibodies, Recombinant antibodies appear to be on average 1-2 order of magnitude higher affinity.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.