abcam

Product datasheet

Anti-Met (c-Met) antibody [EPR19067] ab216574





11 References 13 Images

Overview

Product name Anti-Met (c-Met) antibody [EPR19067]

Rabbit monoclonal [EPR19067] to Met (c-Met) **Description**

Host species Rabbit

Tested applications Suitable for: WB, IHC-P, ICC/IF, Indirect ELISA, Flow Cyt (Intra)

Species reactivity Reacts with: Human, Recombinant fragment

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: A549, HeLa and HepG2 whole cell lysates; Human liver lysate; 293T whole cell lysate

> transfected with a His-tagged human c-Met construct; HeLa whole cell lysate, untreated or treated with PNGase F. IHC-P: Human breast, colon, liver cancer and ovary cancer tissues. ICC/IF: HeLa

and A549 cells. Flow Cyt (intra): A549 and HeLa 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

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 pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

Purity Protein A purified

Clonality Monoclonal Clone number EPR19067

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab216574 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 45-175 kDa (predicted molecular weight: 155 kDa).
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/1000.
Indirect ELISA		Use at an assay dependent concentration.
Flow Cyt (Intra)		1/600.

Target

Function

Receptor for hepatocyte growth factor and scatter factor. Has a tyrosine-protein kinase activity. Functions in cell proliferation, scattering, morphogenesis and survival.

Involvement in disease

Note=Activation of MET after rearrangement with the TPR gene produces an oncogenic protein. Note=Defects in MET may be associated with gastric cancer.

Defects in MET are a cause of hepatocellular carcinoma (HCC) [MIM:114550].

Defects in MET are a cause of renal cell carcinoma papillary (RCCP) [MIM:605074]. It is a subtype of renal cell carcinoma tending to show a tubulo-papillary architecture formed by numerous, irregular, finger-like projections of connective tissue. Renal cell carcinoma is a heterogeneous group of sporadic or hereditary carcinoma derived from cells of the proximal renal tubular epithelium. It is subclassified into common renal cell carcinoma (clear cell, non-papillary carcinoma), papillary renal cell carcinoma, chromophobe renal cell carcinoma, collecting duct carcinoma with medullary carcinoma of the kidney, and unclassified renal cell carcinoma. Note=A common allele in the promoter region of the MET shows genetic association with susceptibility to autism in some families. Functional assays indicate a decrease in MET promoter activity and altered binding of specific transcription factor complexes.

Note=MET activating mutations may be involved in the development of a highly malignant, metastatic syndrome known as cancer of unknown primary origin (CUP) or primary occult malignancy. Systemic neoplastic spread is generally a late event in cancer progression. However, in some instances, distant dissemination arises at a very early stage, so that metastases reach clinical relevance before primary lesions. Sometimes, the primary lesions cannot be identified in spite of the progresses in the diagnosis of malignancies.

Sequence similarities

Belongs to the protein kinase superfamily. Tyr protein kinase family.

Contains 3 IPT/TIG domains.

Contains 1 protein kinase domain.

Contains 1 Sema domain.

Domain

The kinase domain is involved in SPSB1 binding.

Post-translational modifications

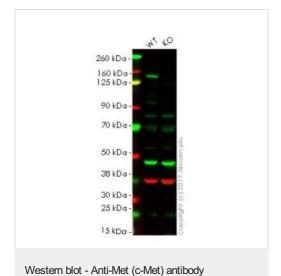
Dephosphorylated by PTPRJ at Tyr-1349 and Tyr-1365.

Cellular localization

[EPR19067] (ab216574)

Membrane.

Images



All lanes : Anti-Met (c-Met) antibody [EPR19067] (ab216574) at 1/1000 dilution

All lanes:

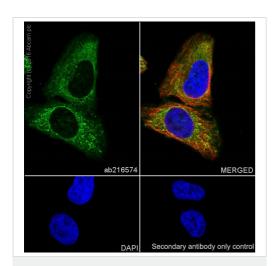
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

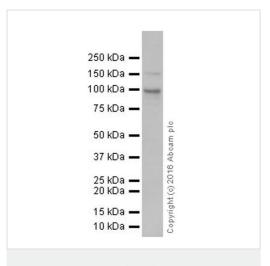
Predicted band size: 155 kDa **Observed band size:** 156 kDa

Lanes 1 - 2: Merged signal (red and green). Green - ab216574 observed at 156 kDa. Red - loading control, **ab8245** observed at 37 kDa.

ab216574 was shown to react with Met (c-Met) in wild-type HeLa. Loss of signal was observed when knockout cell line ab265961 (knockout cell lysate ab256991) was used. Wild-type and Met (c-Met) knockout samples were subjected to SDS-PAGE. ab216574 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) 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 (ab216773) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-Met (c-Met) antibody [EPR19067] (ab216574)



Western blot - Anti-Met (c-Met) antibody [EPR19067] (ab216574)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling Met (c-Met) with ab216574 at 1/1000 dilution, followed by Goat anti-rabbit lgG (Alexa Fluor[®] 488) (ab150077) secondary antibody at 1/1000 dilution (green).

Confocal image showing cytoplasmic staining on HeLa cell line.

The nuclear counterstain is DAPI (blue).

Tubulin is detected with <u>ab195889</u> (Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor[®] 594)) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat anti-rabbit lgG (Alexa Fluor[®] 488) (ab150077) at 1/1000 dilution.

Anti-Met (c-Met) antibody [EPR19067] (ab216574) at 1/1000 dilution + Human liver lysate at 10 µg

Secondary

Goat Anti-Rabbit lgG Peroxidase Conjugate, specific to the non-reduced form of lgG at 1/10000 dilution

Predicted band size: 155 kDa

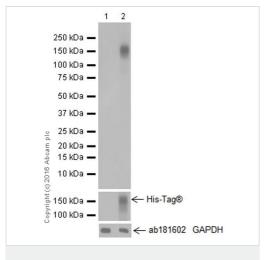
Observed band size: 100-150 kDa

Exposure time: 30 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

In human liver the antibody detected c-Met beta subunit (145 kDa) [PMID: 22418436] and a cleavage c-Met fragment (100 kDa)

[PMID: 18187039].



Western blot - Anti-Met (c-Met) antibody [EPR19067] (ab216574)

All lanes : Anti-Met (c-Met) antibody [EPR19067] (ab216574) at 1/10000 dilution

Lane 1: 293T whole cell lysate (Human epithelial cell line from embryonic kidney) transfected with an empty expression vector **Lane 2**: 293T whole cell lysate transfected with a His-tagged human c-Met construct

Lysates/proteins at 10 µg per lane.

Secondary

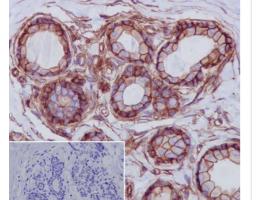
All lanes : Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 155 kDa

Observed band size: 150-175 kDa

Exposure time: 1 second

Blocking and Diluting buffer and concentration: 5% NFDM /TBST



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Met (c-Met) antibody
[EPR19067] (ab216574)

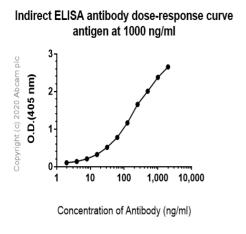
Immunohistochemical analysis of paraffin-embedded human breast tissue labeling Met (c-Met) with ab216574 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Membranous staining on human breast is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) ready to use.

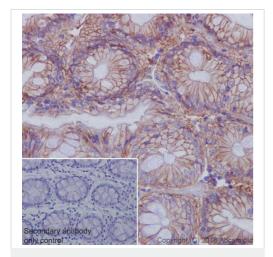
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Indirect ELISA - Anti-Met (c-Met) antibody

[EPR19067] (ab216574)

ELISA analysis of Human c-met recombinant protein at 1000 ng/mL with ab216574. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit lgG (H+L) at 1/2500 dilution was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Met (c-Met) antibody
[EPR19067] (ab216574)

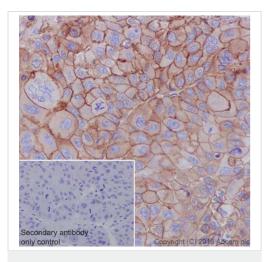
Immunohistochemical analysis of paraffin-embedded human colon tissue labeling Met (c-Met) with ab216574 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Membranous staining on human colon is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) ready to use.

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



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Met (c-Met) antibody
[EPR19067] (ab216574)

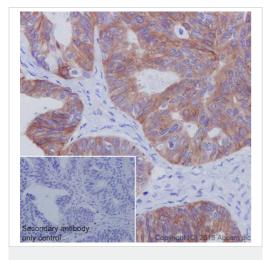
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue labeling Met (c-Met) with ab216574 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Membranous staining on tumor cells of human liver cancer is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) ready to use.

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



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Met (c-Met) antibody [EPR19067] (ab216574)

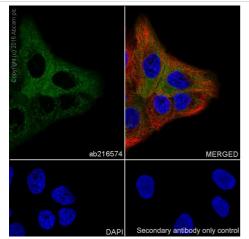
Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue labeling Met (c-Met) with ab216574 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Cytoplasmic and membranous staining on tumor cells of human ovary cancer is observed.

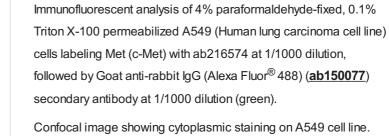
Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) ready to use.

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



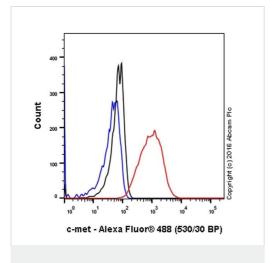
Immunocytochemistry/ Immunofluorescence - Anti-Met (c-Met) antibody [EPR19067] (ab216574)



The nuclear counterstain is DAPI (blue).

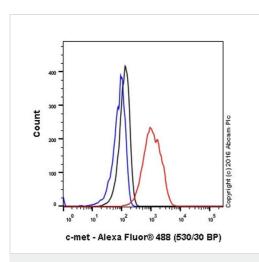
Tubulin is detected with ab195889 (Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594)) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat anti-rabbit lgG (Alexa Fluor® 488) (ab150077) at 1/1000 dilution.



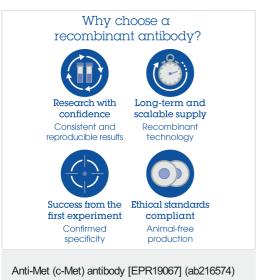
Flow Cytometry (Intracellular) - Anti-Met (c-Met) antibody [EPR19067] (ab216574)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed A549 (Human lung carcinoma cell line) cells labeling Met (c-Met) with ab216574 at 1/600 dilution (red) compared with a rabbit monoclonal IgG isotype control (ab172730; black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit lgG (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody.



Flow Cytometry (Intracellular) - Anti-Met (c-Met) antibody [EPR19067] (ab216574)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling Met (c-Met) with ab216574 at 1/600 dilution (red) compared with a rabbit monoclonal IgG isotype control (ab172730; black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody.



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