abcam

Product datasheet

Anti-Met (c-Met) antibody [EP1454Y] - BSA and Azide free ab157370

KO VALIDATED Recombinant RabMAb

7 Images

Overview

Product name	Anti-Met (c-Met) antibody [EP1454Y] - BSA and Azide free
Description	Rabbit monoclonal [EP1454Y] to Met (c-Met) - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, WB, Indirect ELISA **Unsuitable for:** Flow Cyt or ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Wild-type HAP1 cell lysate. HepG2, HEK-293 and HeLa cell lysate. Mouse and rat thymus tissue lysate. Mouse lung tissue lysate. Hela and A459 whole cell lysate. IHC-P: Human bladder carcinoma and clear cell kidney carcinoma tissue.
General notes	ab157370 is the carrier-free version of **ab51067**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. 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. 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. 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. Do Not Freeze.
Storage buffer	Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Purification notes	Protein-A purification via MabSelect SuRe
Clonality	Monoclonal
Clone number	EP1454Y
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab157370 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
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Detects a band of approximately 160 kDa (predicted molecular weight: 156 kDa).
Indirect ELISA		Use at an assay dependent concentration.

Application notes Is unsuitable for Flow Cyt or ICC/IF.

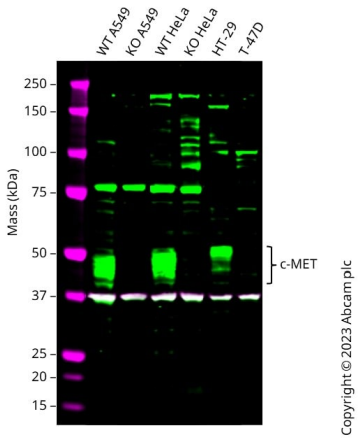
Target

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	Membrane.

Images



Western blot - Anti-Met (c-Met) antibody [EP1454Y] - BSA and Azide free (ab157370)

All lanes : Anti-Met (c-Met) antibody [EP1454Y] - N-terminal (**ab51067**) at 1/1000 dilution

Lane 1 : Wild-type A549 cell lysate
Lane 2 : MET knockout A549 cell lysate
Lane 3 : Wild-type HeLa **ab255929** cell lysate
Lane 4 : MET (Met (c-Met)) knockout HeLa **ab256991** cell lysate
Lane 5 : HT-29 cell lysate
Lane 6 : T-47D cell lysate

Lysates/proteins at 20 µg per lane.

Developed using the ECL technique.

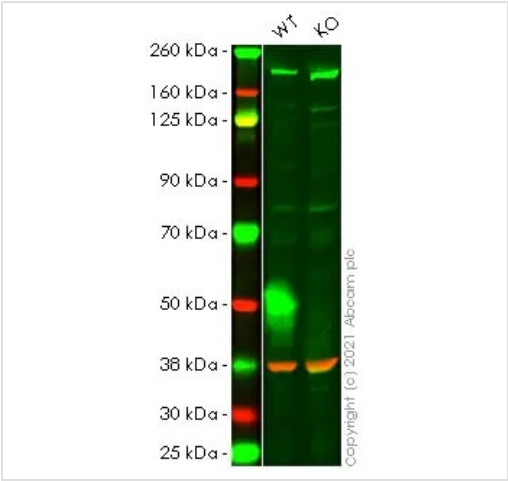
Performed under reducing conditions.

Predicted band size: 156 kDa
Observed band size: 40-50 kDa

This data was developed using the same antibody clone in a different buffer formulation (**ab51067**).

Western blot: Anti-MET antibody [EP1454Y] (**ab51067**) staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (**ab8245**) loading control staining at 1/20000 dilution, shown in magenta. In Western blot, **ab51067** was shown to bind specifically to MET. A band was observed at 40-50 kDa in wild-type A549 cell lysates with no signal observed at this size in MET knockout cell line. To generate this image, wild-type and MET knockout A549 cell

lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3% milk in TBS-0.1% Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Western blot - Anti-Met (c-Met) antibody [EP1454Y] - BSA and Azide free (ab157370)

All lanes : Anti-Met (c-Met) antibody [EP1454Y] - N-terminal (**ab51067**) at 1/1000 dilution

All lanes :

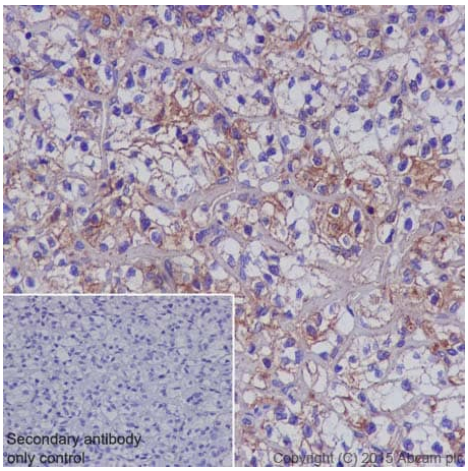
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 156 kDa
Observed band size: 50 kDa

This data was developed using the same antibody clone in a different buffer formulation (**ab51067**).

False colour image of Western blot: Anti-Met (c-Met) antibody [EP1454Y] - N-terminal staining at 1/1000 dilution, shown in green; Rabbit Anti-GAPDH antibody [EPR16891] (**ab181602**) loading control staining at 1/20000 dilution, shown in red. In Western blot, **ab51067** was shown to bind specifically to the alpha chain of c-Met. A band was observed at 50 kDa in wild-type HeLa cell lysates with no signal observed at this size in MET knockout cell line **ab265961** (knockout cell lysate **ab256991**). To generate this image, wild-type and MET knockout HeLa cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were HRP conjugated Goat anti-Rabbit (H+L) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) at 1/20000 dilution.

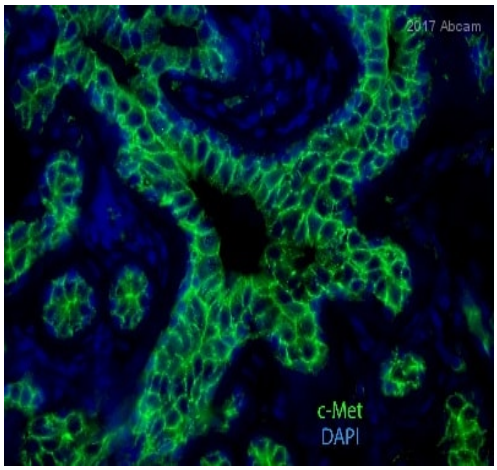


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Met (c-Met) antibody [EP1454Y] - BSA and Azide free (ab157370)

Immunohistochemical staining of paraffin embedded human clear cell kidney carcinoma with purified **ab51067** at a working dilution of 1/100. The secondary antibody used is HRP goat anti-rabbit IgG H&L (**ab97051**) at 1/500. The sample is counterstained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0.

PBS was used instead of the primary antibody as the negative control (inset).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab51067**).



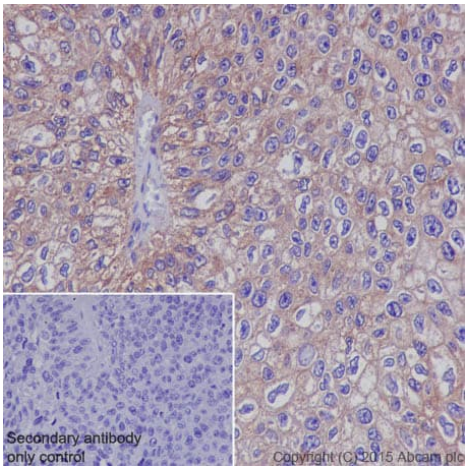
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Met (c-Met) antibody [EP1454Y] - BSA and Azide free (ab157370)

This image is courtesy of an Abreview submitted by David Ivancic.

ab51067 staining Met (c-Met) in human breast tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections).

Tissue was fixed with formaldehyde, permeabilized with 0.05% Tween-20 and blocked for 30 minutes at 22°C; antigen retrieval was by heat mediation in antigen retrieval buffer (100X citrate buffer pH 6.0) (**ab94674**). Samples were incubated with the primary antibody (1/100) for 14 hours at 4°C. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG polyclonal (1/300) was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab51067**).

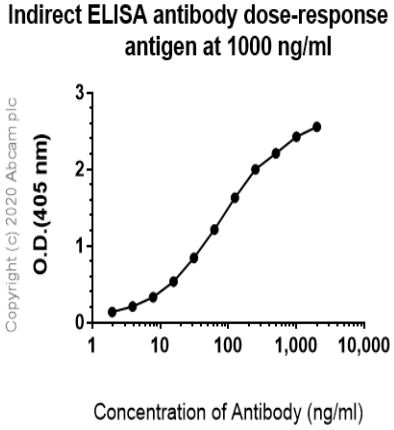


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Met (c-Met) antibody [EP1454Y] - BSA and Azide free (ab157370)

Immunohistochemical staining of paraffin embedded human bladder carcinoma with purified **ab51067** at a working dilution of 1/100. The secondary antibody used is HRP goat anti-rabbit IgG H&L (**ab97051**) at 1/500. The sample is counterstained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0.

PBS was used instead of the primary antibody as the negative control (inset).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab51067**).



Indirect ELISA - Anti-Met (c-Met) antibody [EP1454Y] - BSA and Azide free (ab157370)

This data was developed using **ab51067**, the same antibody clone in a different buffer formulation.

ELISA analysis of Human Met recombinant protein at 1000 ng/mL with **ab51067**. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) at 1/2500 dilution was used as the secondary antibody.

Anti-Met (c-Met) antibody [EP1454Y] - BSA and Azide free (ab157370)

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