

Product datasheet

Anti-Met (c-Met) antibody [EP1454Y] - N-terminal ab51067

KO VALIDATED Recombinant RabMAb[®]

★★★★★ [13 Abreviews](#) [105 References](#) [9 Images](#)

Overview

Product name	Anti-Met (c-Met) antibody [EP1454Y] - N-terminal
Description	Rabbit monoclonal [EP1454Y] to Met (c-Met) - N-terminal
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, Indirect ELISA Unsuitable for: Flow Cyt or ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human Met (c-Met) aa 1-100 (N terminal). The exact sequence is proprietary. Database link: P08581 (Peptide available as ab167073)
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	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none">- 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. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide

	Constituents: PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP1454Y
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab51067 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 - 1/10000. Detects a band of approximately 160 kDa (predicted molecular weight: 156 kDa).
IHC-P	★★★★★ (10)	1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols .
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.

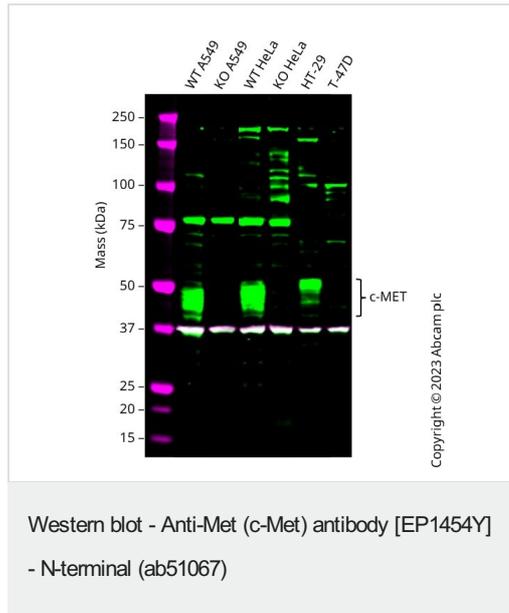
Post-translational modifications

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

Cellular localization

Membrane.

Images



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.

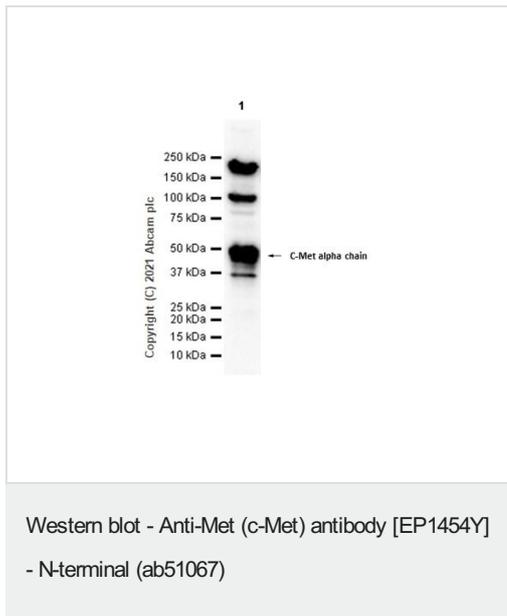
Performed under reducing conditions.

Predicted band size: 156 kDa

Observed band size: 40-50 kDa

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.



Anti-Met (c-Met) antibody [EP1454Y] - N-terminal (ab51067) at 1/1000 dilution + HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates at 20 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/10000 dilution

Predicted band size: 156 kDa

Observed band size: 50 kDa

Exposure time: 60 seconds

Blocking buffer / Diluent and concentration:

5% NFDM/TBST

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

Lane 1 : Wild-type HeLa cell lysate

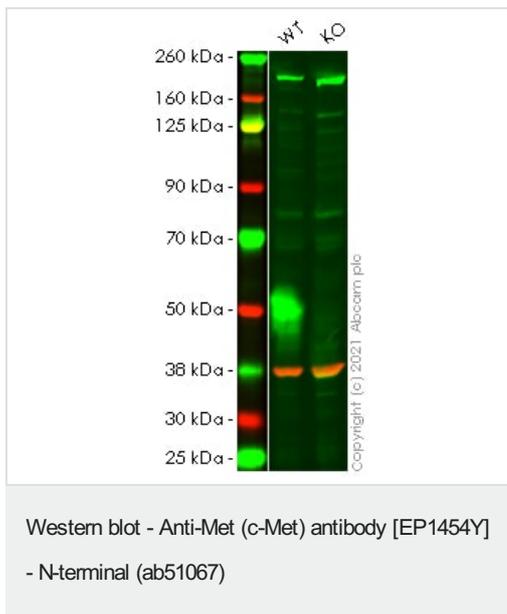
Lane 2 : MET knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

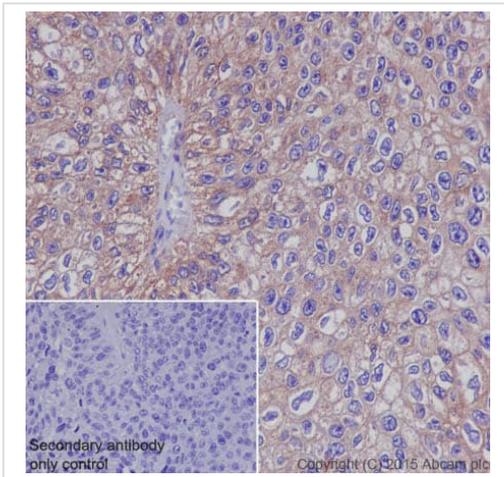
Predicted band size: 156 kDa

Observed band size: 50 kDa



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

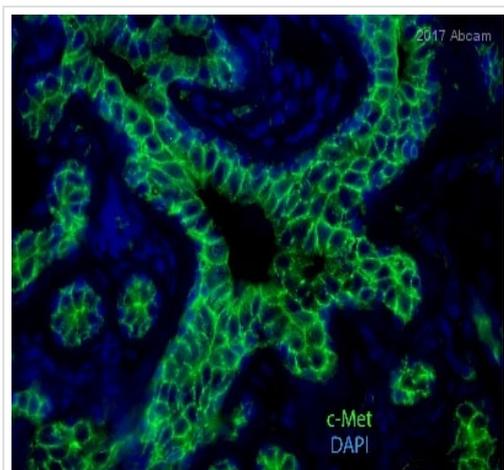
were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween[®] 20 (TBS-T) before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, 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] - N-terminal (ab51067)

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 performed using Tris-EDTA buffer, pH 9.0.

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

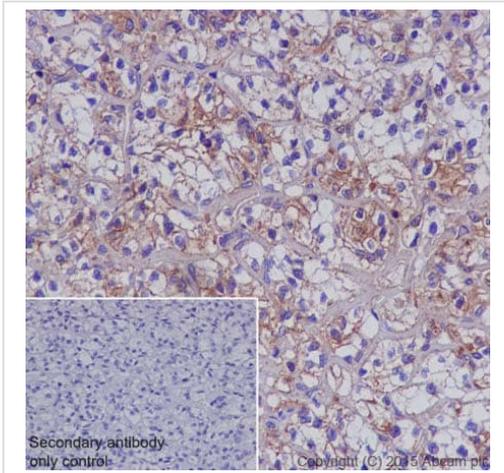


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Met (c-Met) antibody [EP1454Y] - N-terminal (ab51067)

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).

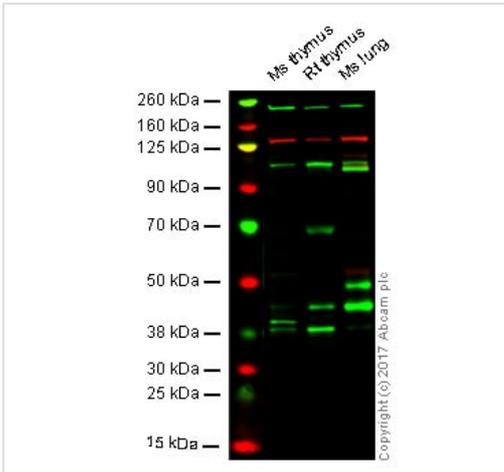
Tissue was fixed with formaldehyde, permeabilized with 0.05% Tween-20 and blocked for 30 minutes at 22°C; antigen retrieval was by heat mediation in antigen retrieval buffer (100X citrate buffer pH 6.0) (**ab94674**). Samples were incubated with the primary antibody (1/100) for 14 hours at 4°C. An Alexa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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Met (c-Met) antibody [EP1454Y] - N-terminal (ab51067)

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 performed using Tris-EDTA buffer, pH 9.0.

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



Western blot - Anti-Met (c-Met) antibody [EP1454Y] - N-terminal (ab51067)

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

Lane 1 : Mouse thymus tissue lysate

Lane 2 : Rat thymus tissue lysate

Lane 3 : Mouse lung tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 156 kDa

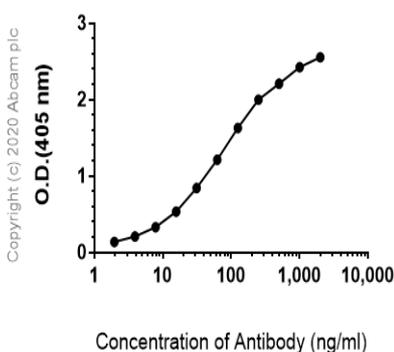
Observed band size: 50 kDa

Lanes 1 - 3: Merged signal (red and green). Green - ab51067 observed at 50 kDa. Red - loading control, [ab18058](#), observed at 130 kDa.

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using Licor blocking

buffer before being incubated with ab51067 and **ab18058** (loading control) overnight at 4°C. Antibody binding was detected using Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) at a 1:10000 dilution for 1 hr at room temperature and then imaged.

Indirect ELISA antibody dose-response curve antigen at 1000 ng/ml



Indirect ELISA - Anti-Met (c-Met) antibody
[EP1454Y] - N-terminal (ab51067)

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.

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-Met (c-Met) antibody [EP1454Y] - N-terminal (ab51067)

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

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