abcam

ab243930

Anti-Met (c-Met) antibody [SP44] - BSA and Azide free

Recombinant | RabMAb | KO Validated

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	SP44
Purification technique	Affinity purification Protein A/G
Concentration	1.004 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from TCS by protein A/G.

Reactivity data

IHC-P

Tested

Species	Human

Dilution info	-
Notes	Primary antibody incubation for 30 minutes at room temperature. Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	Primary antibody incubation for 30 minutes at 4Â°C.

WB

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information MET

Function	Receptor tyrosine kinase that transduces signals from the extracellular matrix into the cytoplasm by binding to hepatocyte growth factor/HGF ligand. Regulates many physiological processes including proliferation, scattering, morphogenesis and survival. Ligand binding at the cell surface induces autophosphorylation of MET on its intracellular domain that provides docking sites for downstream signaling molecules. Following activation by ligand, interacts with the PI3-kinase subunit PIK3R1, PLCG1, SRC, GRB2, STAT3 or the adapter GAB1. Recruitment of these downstream effectors by MET leads to the activation of several signaling cascades including the RAS-ERK, PI3 kinase-AKT, or PLCgamma-PKC. The RAS-ERK activation is associated with the morphogenetic effects while PI3K/AKT coordinates prosurvival effects. During embryonic development, MET signaling plays a role in gastrulation, development and migration of neuronal precursors, angiogenesis and kidney formation. During skeletal muscle development, it is crucial for the migration of muscle progenitor cells and for the proliferation of secondary myoblasts (By similarity). In adults, participates in wound healing as well as organ regeneration and tissue remodeling. Also promotes differentiation and proliferation of hematopoietic cells. May regulate cortical bone osteogenesis (By similarity). (Microbial infection) Acts as a receptor for Listeria monocytogenes internalin InlB, mediating entry of the pathogen into cells.

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

ab243930 is the carrier-free version of ab227637.

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.

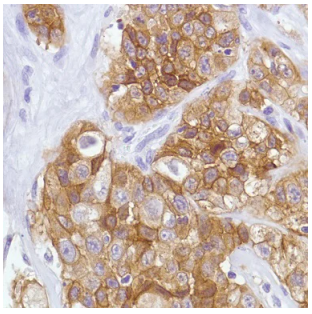
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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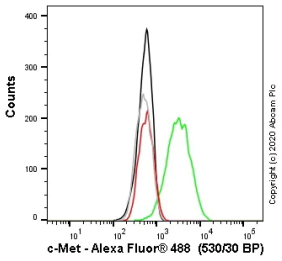
9 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Met (c-Met) antibody [SP44] - BSA and Azide free (ab243930)

Met (c-Met) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Met (c-Met) antibody

Formalin-fixed, paraffin-embedded human colon adenocarcinoma tissue stained for Met (c-Met) using ab227637 at 1/50 dilution in immunohistochemical analysis.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab227637).



Flow Cytometry (Intracellular) - Anti-Met (c-Met) antibody [SP44] - BSA and Azide free (ab243930)

Met (c-Met) Flow Cytometry (Intracellular) staining using rabbit Anti-Met (c-Met) antibody

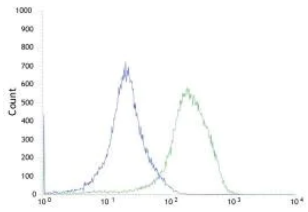
This data was developed using the same antibody clone in a different buffer formulation (ab227637).

Flow cytometry overlay histogram showing wild-type HAP1 (green line) and MET knockout HAP1 cells stained with ab227637 (red line). The cells were fixed with 4% formaldehyde (10 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS containing 10% normal goat serum to block non-specific protein-protein interaction followed by the antibody (ab227637) ($1x10^6$ in 100 µl at 0.04 µg/ml) for 30 min at 22°C.

The secondary antibody Goat anti-rabbit IgG H&L (Alexa Fluor® 488, pre-adsorbed) (ab150081) was used at 1/2000 for 30 min at 22°C.

Isotype control antibody was Rabbit IgG (monoclonal) (ab172730) used at the same concentration and conditions as the primary antibody (wild-type HAP1 - black line MET knockout HAP1 - grey line). Unlabelled sample was also used as a control (this line is not shown for the purpose of simplicity).

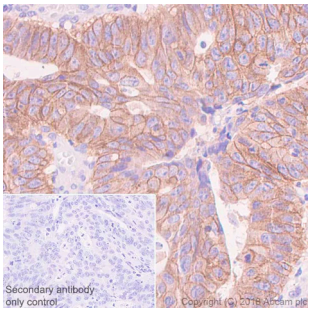
Acquisition of >5000 events were collected using a .



Flow Cytometry (Intracellular) - Anti-Met (c-Met) antibody [SP44] - BSA and Azide free (ab243930)

Met (c-Met) Flow Cytometry (Intracellular) staining using rabbit Anti-Met (c-Met) antibody

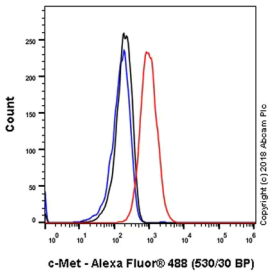
Intracellular flow cytometric analysis ofHT-29 (human colorectal adenocarcinoma cell line) cell line labeling Met (c-Met) with ab227637 at 1/100 dilution (green) compared with a negative control of rabbit IgG (blue).
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab227637).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Met (c-Met) antibody [SP44] - BSA and Azide free (ab243930)

Met (c-Met) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Met (c-Met) antibody

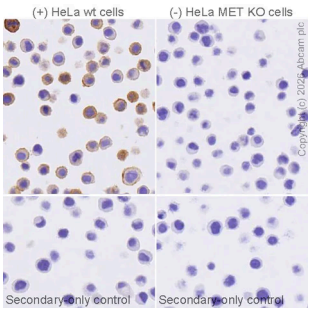
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human colon carcinoma tissue sections labeling Met (c-Met) with ab227637 at 1/50 dilution (4.52 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with sodium citrate buffer (pH 6.0, epitope retrieval solution 1) for 10 mins. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227637)



Flow Cytometry (Intracellular) - Anti-Met (c-Met) antibody [SP44] - BSA and Azide free (ab243930)

Met (c-Met) Flow Cytometry (Intracellular) staining using rabbit Anti-Met (c-Met) antibody

Intracellular Flow Cytometry analysis of HepG2 (Human hepatocellular carcinoma epithelial cell) cells labeling Met (c-Met) with purified ab227637 at 1/20 dilution (11.3µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (ab172730) / Black. Unlabeled control - Unlabelled cells / blue.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227637).

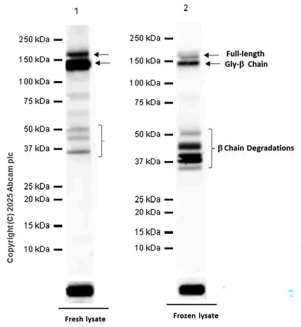


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Met (c-Met) antibody [SP44] - BSA and Azide free (ab243930)

Met (c-Met) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Met (c-Met) antibody

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab227637).

Immunohistochemical analysis of paraffin-embedded HeLa wt cell pellet and HeLa MET KO cell pellet labeling MET (c-MET) with ab227637 at 1/50 dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining in human HeLa wt and negative staining in human HeLa MET KO cells. The section was incubated with ab227637 for 15 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin. Secondary antibody only control : Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins



Western blot - Anti-Met (c-Met) antibody [SP44] - BSA and Azide free (ab243930)

Met (c-Met) Western blot staining using rabbit Anti-Met (c-Met) antibody

This data was developed using ab227637, the same antibody clone in a different buffer formulation.
Blocking and diluting buffer and concentration: 5% NFDM/TBST.

The β chain undergoes degradation, resulting in lower molecular weight fragments (PMID: 32522525). To minimize protein degradation, cells/tissues were lysed immediately after harvest and then applied to a gel and transfer membrane for Western blotting right away.

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/1000000 dilution.

All lanes:
Western blot - Anti-Met (c-Met) antibody [SP44] - C-terminal (ab227637) at 1/1000 dilution

Lane 1:
Fresh HeLa cell lysate at 20 µg

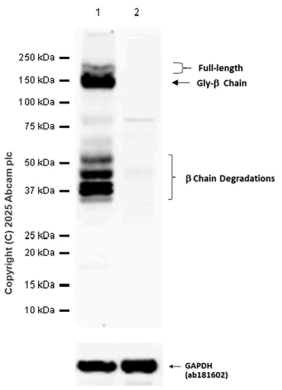
Lane 2:
Frozen HeLa cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 145-175 kDa, 35-55 kDa

Exposure time: 60s



Western blot - Anti-Met (c-Met) antibody [SP44] - BSA and Azide free (ab243930)

Met (c-Met) Western blot staining using rabbit Anti-Met (c-Met) antibody

This data was developed using ab227637, the same antibody clone in a different buffer formulation.
Blocking and diluting buffer and concentration: 5% NFDM/TBST.

c-Met can undergo glycosylation, resulting in a higher molecular weight. It can also be cleaved into α and β chains (PMID: 34210960). The β chain undergoes degradation, resulting in lower molecular weight fragments (PMID: 32522525). This antibody detects both the full-length c-Met and the β chains.

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/1000000 dilution.

All lanes:
Western blot - Anti-Met (c-Met) antibody [SP44] - C-terminal (ab227637) at 1/1000 dilution

Lane 1:
Wild-type HeLa cell lysate at 20 µg

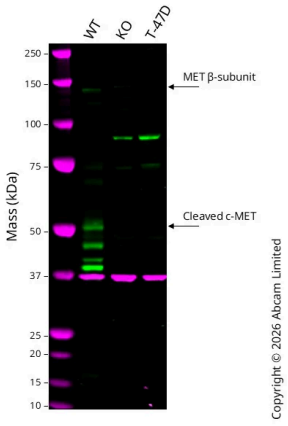
Lane 2:
MET knockout HeLa cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 145-175 kDa, 35-55 kDa

Exposure time: 60s



Western blot - Anti-Met (c-Met) antibody [SP44] - BSA and Azide free (ab243930)

Met (c-Met) Western blot staining using rabbit Anti-Met (c-Met) antibody

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab227637).

Western blot: Anti-Met (c-Met) antibody [SP44] - C-terminal ab227637 staining at 1/1000 dilution, shown in green; Mouse anti GAPDH ab8245 loading control staining at 1/20000 dilution, shown in magenta. A band was observed at 50, 140 kDa in Wild-type HeLa cell line with no signal observed at this size in MET (C-MET) knockout HeLa cell line. To generate this image, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 5% 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 800CW and Goat anti-Mouse 680RD at 1/20,000 dilution.
All lanes:
Western blot - Anti-Met (c-Met) antibody [SP44] - C-terminal (ab227637) at 1/1000 dilution

Lane 1:
Wild-type HeLa cell lysates at 20 µg

Lane 2:

Western blot - Human MET (Met (c-Met)) knockout HeLa cell line (ab265961) at 20 µg

Lane 3:
T-47D cell lysates at 20 µg

Secondary

All lanes:
Goat anti-Rabbit 800CW & Goat anti-Mouse 680RD at 1/20000 dilution

Performed under reducing conditions.

Predicted band size: 35-55 kDa, 145-175 kDa

Observed band size: 50 kDa, 140 kDa

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