abcam

ab313323

Anti-TRAP220/MED1 antibody [EPR24656-87]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR24656-87
Purification technique	Affinity purification Protein A
Concentration	0.515 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Human
Dilution info	1/100
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/500
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information MED1

Function	Component of the Mediator complex, a coactivator involved in the regulated transcription of nearly all RNA polymerase II-dependent genes. Mediator functions as a bridge to convey information from gene-specific regulatory proteins to the basal RNA polymerase II transcription machinery. Mediator is recruited to promoters by direct interactions with regulatory proteins and serves as a scaffold for the assembly of a functional preinitiation complex with RNA polymerase II and the general transcription factors (PubMed:10406464, PubMed:11867769, PubMed:12037571, PubMed:12218053, PubMed:12556447, PubMed:14636573, PubMed:15340084, PubMed:15471764, PubMed:15989967, PubMed:16574658, PubMed:9653119). Acts as a coactivator for GATA1-mediated transcriptional activation during erythroid differentiation of K562 erythroleukemia cells (PubMed:24245781).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot

Storage information	Avoid freeze / thaw cycle

Notes

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.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	TRAP220 also known as MED1 is a protein with a molecular mass of approximately 220 kDa. It plays an important role as a component of the mediator complex which is important for transcription regulation. The expression of TRAP220/MED1 is found in various tissues with higher levels observed in liver lung and heart tissues. This protein acts mechanistically as a bridge between gene-specific transcription factors and RNA polymerase II facilitating the assembly of the pre-initiation complex.
Biological function summary	TRAP220/MED1 functions within the larger mediator complex a multi-protein coactivator essential for gene transcription by RNA polymerase II. It plays an important role in nuclear receptor signaling facilitating the transcriptional activation by various nuclear hormone receptors. MED1 interacts directly with these receptors through its various domains allowing the transcription of target genes responsive to hormonal signals.
Pathways	TRAP220/MED1 contributes significantly to transcriptional activation pathways involving nuclear receptors such as the PPAR (Peroxisome Proliferator-Activated Receptor) and thyroid hormone receptor pathways. It closely interacts with other proteins in these pathways including MED12 and MED14 which form integral parts of the mediator complex's function. Its involvement in these pathways highlights its critical role in lipid metabolism and energy homeostasis.
Associated diseases and disorders	TRAP220/MED1 is associated with metabolic and proliferative diseases. Its altered expression or mutations can lead to conditions such as obesity and cancer. For instance aberrant MED1 activity or expression levels have connections to breast cancer development through its role in estrogen receptor-mediated gene expression. This correlation emphasizes the protein's potential impact in various pathophysiological contexts driving ongoing research into MED1 as a therapeutic target.

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

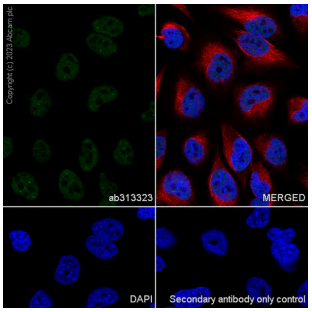
We do not recommend this combination. It is not covered by our product promise.

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.

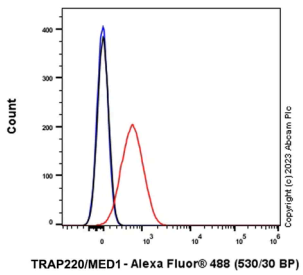
Full details and terms and conditions can be found here:
Terms & Conditions.

4 product images



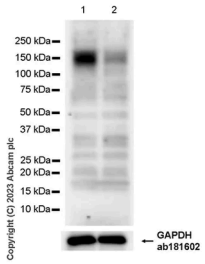
Immunocytochemistry/ Immunofluorescence - Anti-TRAP220/MED1 antibody [EPR24656-87] (ab313323)

Immunofluorescent analysis of 100% methanol-fixed, 0.1% TritonX-100 permeabilized HeLa (human cervical adenocarcinoma epithelial cell) cells labelling TRAP220/MED1 with ab313323 at 1/100 (5.15 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2 ug/ml dilution (Green). Confocal image showing nuclear staining in HeLa cell line.Image was taken with a confocal microscope(Leica-Microsystems, TCS SP8). is observed. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Red). The Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/ml dilution.



Flow Cytometry (Intracellular) - Anti-TRAP220/MED1 antibody [EPR24656-87] (ab313323)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized Hela (human cervical adenocarcinoma epithelial cell) cells labelling TRAP220/MED1 with ab313323 at 1/500 dilution (0.1 ug)/Red (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



Western blot - Anti-TRAP220/MED1 antibody [EPR24656-87] (ab313323)

TRAP220/MED1 Western blot staining using rabbit Anti-TRAP220/MED1 antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST In Western blot, anti-GAPDH antibody (ab181602) loading control staining at 1/200000 dilution. Exposure time: 48 seconds
All lanes:
Western blot - Anti-TRAP220/MED1 antibody [EPR24656-87] (ab313323) at 1/1000 dilution

Lane 1:
HeLa (human cervical adenocarcinoma epithelial cell) transfected with scrambled siRNA control whole cell lysate at 50 µg

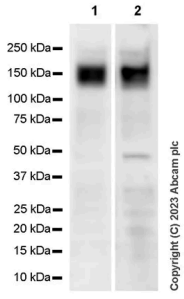
Lane 2:
HeLa transfected with siRNA specifically targeti MED1 whole cell lysate at 50 µg

Secondary

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

Observed band size: 168 kDa

Exposure time: 48s



Western blot - Anti-TRAP220/MED1 antibody [EPR24656-87] (ab313323)

Blocking and diluting buffer and concentration: 5% NFDM/TBST Lysates were freshly made and used for Western blotting immediately to minimize protein degradation. Exposure time: Lane 1: 15 seconds, Lane 2: 37 seconds.
All lanes:
Western blot - Anti-TRAP220/MED1 antibody [EPR24656-87] (ab313323) at 1/1000 dilution

Lane 1:
U-2OS (human bone osteosarcoma epithelial cell) whole cell lysate at 50 µg

Lane 2:
MG-63 (human osteosarcoma fibroblast) whole cell lysate at 50 µg

Secondary

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

Observed band size: 168 kDa

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