abcam

ab176346

Anti-MTA3 antibody [EPR12777(B)]

Recombinant | RabMAb

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	EPR12777(B)
Purification technique	Affinity purification Protein A
Concentration	0.1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/10 - 1/100
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information MTA3

Function	Acts as a component of the histone deacetylase NuRD complex which participates in the remodeling of chromatin (PubMed:12705869, PubMed:16428440, PubMed:28977666). Plays a role in maintenance of the normal epithelial architecture through the repression of SNAI1 transcription in a histone deacetylase-dependent manner, and thus the regulation of E-cadherin levels (PubMed:12705869). Contributes to transcriptional repression by BCL6 (PubMed:15454082).

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	The MTA3 protein also known as Metastasis-Associated Protein 3 is a member of the MTA family and has a molecular mass of approximately 53 kDa. MTA3 localizes in the nucleus and shows expression in various tissues including breast tissue and the immune system. It functions as a transcriptional corepressor particularly influencing E-cadherin repression by being part of the nucleosome remodeling and histone deacetylase (NuRD) complex.
Biological function summary	Activities involving gene expression regulation occur through interactions with other chromatin-associated molecules. MTA3 participates as a component of the NuRD complex which also includes Mi2 and HDAC1 that is critical in chromatin remodeling and transcriptional repression. Through MTA3's involvement the complex influences cell proliferation differentiation and epithelial-mesenchymal transition (EMT).
Pathways	MTA3 is particularly significant in the EMT pathway affecting cell migration and invasion capacities. It interacts with proteins such as TWIST and ZEB1 which are associated with EMT. Additionally MTA3 plays a role in the Notch signaling pathway where it helps in maintaining proper cell lineage differentiation by modulating transcription factors through deacetylation processes.
Associated diseases and disorders	Altered MTA3 expression is seen in breast cancer and has a link to its progression. It connects closely with E-cadherin which serves as a marker for EMT and cancer metastasis. MTA3's involvement in histone modification pathways also correlates with altered gene expression seen in various autoimmune disorders making it a possible point of interest for therapeutic research and interventions.

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.

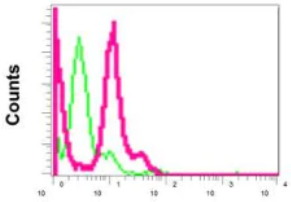
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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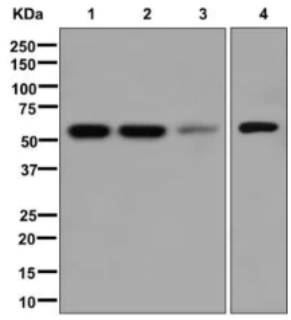
3 product images



Flow Cytometry (Intracellular) - Anti-MTA3 antibody [EPR12777(B)] (ab176346)

MTA3 Flow Cytometry (Intracellular) staining using rabbit Anti-MTA3 antibody

Intracellular flow cytometric analysis of permeabilized Ramos cells labeling MTA3with ab176346 at 1/10 dilution (red)or a rabbit IgG (negative) (green).



Western blot - Anti-MTA3 antibody [EPR12777(B)] (ab176346)

All lanes:
Western blot - Anti-MTA3 antibody [EPR12777(B)] (ab176346) at 1/1000 dilution

Lane 1:
T47D cell lysate at 10 µg

Lane 2:
HeLa cell lysate at 10 µg

Lane 3:
MCF7 cell lysate at 10 µg

Lane 4:
Ramos cell lysate at 10 µg

Predicted band size: 68 kDa

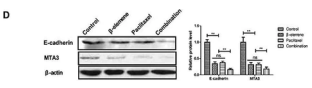


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Western blot - Anti-MTA3 antibody [EPR12777(B)] (ab176346)

MTA3 Western blot staining using rabbit Anti-MTA3 antibody

MTA3 western blot using anti-MTA3 antibody [EPR12777(B)] ab176346. Publication image and figure legend from Xiaomeng, F., Lei, L., et al., 2020, Braz J Med Biol Res, PubMed 32401925.

ab176346 was used in this publication in western blot. This may not be the same as the application(s) guaranteed by Abcam. For a full list of applications guaranteed by Abcam for

ab176346 please see the product overview.

Effect of β-elemene+paclitaxel on migration (A) andinvasion (B) of SKOV3 cells (magnification bar, 100 μm).C and D, Relative E-cadherin and MTA3 mRNA(C) and protein (D) expression in SKOV3cells after treatment with β-elemene and/or paclitaxel. Data arereported as means±SD. **p<0.01 (ANOVA followed by Tukey's multiplecomparison post hoc test). ns: not significant.

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