# abcam

# Product datasheet

# Anti-MTA1 antibody ab71153

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#### Overview

Product name Anti-MTA1 antibody

**Description** Rabbit polyclonal to MTA1

Host species Rabbit

Tested applications

Suitable for: WB, IP, IHC-P

Species reactivity

Reacts with: Mouse, Human

Predicted to work with: Rat, Rabbit, Horse, Guinea pig, Rhesus monkey, Gorilla, Chinese

hamster, Orangutan, Xenopus tropicalis, Platypus 🔷

**Immunogen** A synthetic peptide corresponding to a region between residue 665 and the C-terminus (residue

715) of MTA1 (NP\_004680.1).

**General notes**The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 6.8

Preservative: 0.09% Sodium azide

Constituents: 0.1% BSA, Tris buffered saline

Purity Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

#### **Applications**

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# The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab71153 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		Use a concentration of 0.1 µg/ml. Detects a band of approximately 35, 81 kDa (predicted molecular weight: 81 kDa).
IP		Use at 2-5 µg/mg of lysate.
IHC-P	<b>★★★★★</b> (5)	1/500 - 1/2000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

#### **Target**

Function	May be involved in the regulation of gene expression by covalent modification of histone proteins.
	Isoform Long is a corepressor of estrogen recentor (FR) Isoform Short hinds to FR and

sequesters it in the cytoplasm and enhances non-genomic responses of ER.

**Tissue specificity** Widely expressed. High expression in brain, ovaries, adrenal glands and virgin mammary glands.

Higher in tumors than in adjacent normal tissue from the same individual.

Sequence similarities Contains 1 BAH domain.

Contains 1 ELM2 domain.

Contains 1 GATA-type zinc finger.

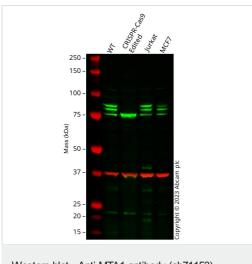
Contains 1 SANT domain.

**Developmental stage** Highly expressed in metastatic cells.

**Domain** Isoform Short contains a Leu-Arg-lle-Leu-Leu motif (ER binding motif).

**Cellular localization** Cytoplasm and Nucleus.

#### **Images**



Western blot - Anti-MTA1 antibody (ab71153)

All lanes: Anti-MTA1 antibody (ab71153) at 1/2000 dilution

Lane 1: Wild-type HEK-293 cell lysate

Lane 2: Mta1 CRISPR-Cas9 edited HEK-293 cell lysate

Lane 3 : Jurkat cell lysate

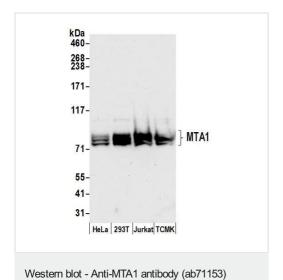
Lane 4 : MCF7 cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 81 kDa **Observed band size:** 80-85 kDa

False colour image of Western blot: Anti-MTA1 antibody staining at 1/2000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (ab8245) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab71153 was shown to bind specifically to MTA1. A band was observed at 80/85 kDa in wild-type HEK-293 cell lysates with no signal observed at this size in Mta1 CRISPR-Cas9 edited cell line ab277164 (CRISPR-Cas9 edited cell lysate ab277206). The band observed in the CRISPR-Cas9 edited lysate lane below 80/85 kDa is likely to represent a truncated form of MTA1. This has not been investigated further and the functional properties of the gene product have not been determined. To generate this image, wild-type and Mta1 CRISPR-Cas9 edited HEK-293 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.



All lanes: Anti-MTA1 antibody (ab71153) at 0.1 µg/ml

Lane 1: HeLa whole cell lysate

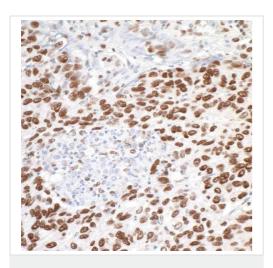
Lane 2: HEK293T whole cell lysate

Lane 3: Jurkat whole cell lysate

Lane 4: TCMK whole cell lysate

Lysates/proteins at 50 µg per lane.

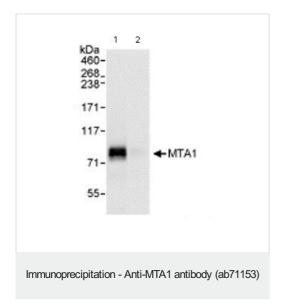
Predicted band size: 81 kDa



sections) analysis of human non-small cell lung cancer tissue labelling MTA1 with ab71153 at 1/1000 (0.2  $\mu$ g/ml). Detection: DAB.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MTA1 antibody (ab71153)



Immunoprecipitation/ Western Blot of MTA1

Lane 1: ab71153 at 3µg/mg whole cell lysate.

Lane 2: Control IgG.

Whole cell lysate from Hela cells at 1mg for IP, 20% of IP loaded. Subsequent WB detection was performed using 1  $\mu$ g/ml ab71153. Chemiluminescence with an exposure time of 1 second.

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

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