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MTA1 Antibody(C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19705B

Product Information

Application	WB, E
Primary Accession	Q13330
Other Accession	Q62599, Q8K4B0, NP_004680.2
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB40949
Calculated MW	80786
Antigen Region	659-687

Additional Information

Gene ID	9112
Other Names	Metastasis-associated protein MTA1, MTA1
Target/Specificity	This MTA1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 659-687 amino acids from the C-terminal region of human MTA1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MTA1 Antibody(C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MTA1
Function	Transcriptional coregulator which can act as both a transcriptional corepressor and coactivator (PubMed:16617102, PubMed:17671180, PubMed:17922032, PubMed:21965678, PubMed:24413532). Acts as a

	component of the histone deacetylase NuRD complex which participates in the remodeling of chromatin (PubMed:16428440, PubMed:28977666). In the NuRD complex, regulates transcription of its targets by modifying the acetylation status of the target chromatin and cofactor accessibility to the target DNA (PubMed:17671180). In conjunction with other components of NuRD, acts as a transcriptional corepressor of BRCA1, ESR1, TFF1 and CDKN1A (PubMed:17922032, PubMed:24413532). Acts as a transcriptional coactivator of BCAS3, and SUMO2, independent of the NuRD complex (PubMed:16617102, PubMed:17671180, PubMed:21965678). Stimulates the expression of WNT1 by inhibiting the expression of its transcriptional corepressor SIX3 (By similarity). Regulates p53-dependent and -independent DNA repair processes following genotoxic stress (PubMed:19837670). Regulates the stability and function of p53/TP53 by inhibiting its ubiquitination by COP1 and MDM2 thereby regulating the p53-dependent DNA repair (PubMed:19837670). Plays a role in the regulation of the circadian clock and is essential for the generation and maintenance of circadian rhythms under constant light and for normal entrainment of behavior to light-dark (LD) cycles (By similarity). Positively regulates the CLOCK- BMAL1 heterodimer mediated transcriptional activation of its own transcription and the transcription of CRY1 (By similarity). Regulates deacetylation of BMAL1 by regulating SIRT1 expression, resulting in derepressing CRY1-mediated transcription repression (By similarity). With TFCP2L1, promotes establishment and maintenance of pluripotency in embryonic stem cells (ESCs) and inhibits endoderm differentiation (By similarity).
Cellular Location	Nucleus [Isoform Long]: Nucleus. Nucleus envelope. Cytoplasm. Cytoplasm, cytoskeleton. Note=Associated with microtubules (PubMed:24970816). Localization at the nuclear envelope is TPR- dependent (PubMed:24970816).
Tissue Location	Widely expressed. High expression in brain, liver, kidney, and cardiac muscle, ovaries, adrenal glands and virgin mammary glands. Higher in tumors than in adjacent normal tissue from the same individual. Up-regulated in a wide variety of cancers including breast, liver, ovarian, and colorectal cancer and its expression levels are closely correlated with tumor aggressiveness and metastasis

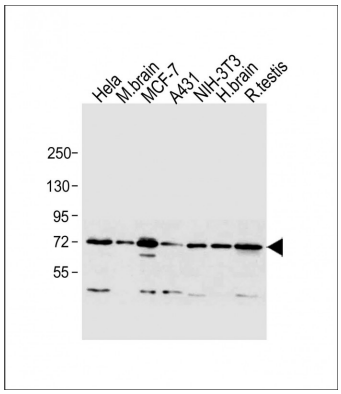
Background

This gene encodes a protein that was identified in a screen for genes expressed in metastatic cells, specifically, mammary adenocarcinoma cell lines. Expression of this gene has been correlated with the metastatic potential of at least two types of carcinomas although it is also expressed in many normal tissues. The role it plays in metastasis is unclear. It was initially thought to be the 70kD component of a nucleosome remodeling deacetylase complex, NuRD, but it is more likely that this component is a different but very similar protein. These two proteins are so closely related, though, that they share the same types of domains. These domains include two DNA binding domains, a dimerization domain, and a domain commonly found in proteins that methylate DNA. The profile and activity of this gene product suggest that it is involved in regulating transcription and that this may be accomplished by chromatin remodeling. [provided by RefSeq].

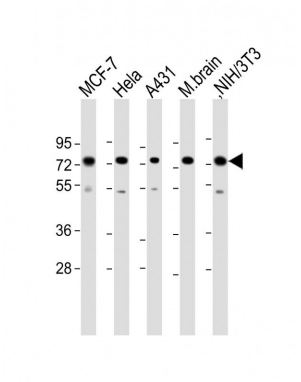
References

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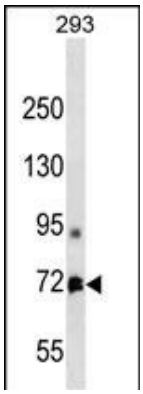
Images



All lanes : Anti-MTA1 Antibody(C-term) at 1:1000 dilution Lane 1: Hela whole cell lysate Lane 2: mouse brain lysate Lane 3: MCF-7 whole cell lysate Lane 4: A431 whole cell lysate Lane 5: NIH-3T3 whole cell lysate Lane 6: human brain lysate Lane 7: rat testis lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 81 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-MTA1 Antibody(C-term) at 1:2000 dilution Lane 1: MCF-7 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: A431 whole cell lysate Lane 4: mouse brain lysate Lane 5: NIH/3T3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 81 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



MTA1 Antibody (C-term) (Cat. #AP19705b) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the MTA1 antibody detected the MTA1 protein (arrow).

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