

**Anti-MTA1 Antibody**  
**Rabbit polyclonal antibody to MTA1**  
**Catalog # AP60489****Specification**

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**Anti-MTA1 Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">O13330</a>
Other Accession	<a href="#">O8K4B0</a>
Reactivity	<b>Human, Mouse, Rat</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>80786</b>

**Anti-MTA1 Antibody - Additional Information****Gene ID** 9112**Other Names**

Metastasis-associated protein MTA1

**Target/Specificity**

Recognizes endogenous levels of MTA1 protein.

**Dilution**

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200)

**Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

**Storage**

Store at -20 °C. Stable for 12 months from date of receipt

**Anti-MTA1 Antibody - Protein Information****Name** MTA1**Function**

Transcriptional coregulator which can act as both a transcriptional corepressor and coactivator (PubMed: [16617102](http://www.uniprot.org/citations/16617102)), PubMed: [17671180](http://www.uniprot.org/citations/17671180), PubMed: [17922032](http://www.uniprot.org/citations/17922032), PubMed: [21965678](http://www.uniprot.org/citations/21965678), PubMed: [24413532](http://www.uniprot.org/citations/24413532)). Acts as a component of the histone deacetylase NuRD complex which participates in the remodeling of chromatin (PubMed: [16428440](http://www.uniprot.org/citations/16428440), PubMed: [28977666](http://www.uniprot.org/citations/28977666))

target="\_blank">28977666</a>). 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:<a href="http://www.uniprot.org/citations/17671180" target="\_blank">17671180</a>). In conjunction with other components of NuRD, acts as a transcriptional corepressor of BRCA1, ESR1, TFF1 and CDKN1A (PubMed:<a href="http://www.uniprot.org/citations/17922032" target="\_blank">17922032</a>, PubMed:<a href="http://www.uniprot.org/citations/24413532" target="\_blank">24413532</a>). Acts as a transcriptional coactivator of BCAS3, and SUMO2, independent of the NuRD complex (PubMed:<a href="http://www.uniprot.org/citations/16617102" target="\_blank">16617102</a>, PubMed:<a href="http://www.uniprot.org/citations/17671180" target="\_blank">17671180</a>, PubMed:<a href="http://www.uniprot.org/citations/21965678" target="\_blank">21965678</a>). 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:<a href="http://www.uniprot.org/citations/19837670" target="\_blank">19837670</a>). Regulates the stability and function of p53/TP53 by inhibiting its ubiquitination by COP1 and MDM2 thereby regulating the p53-dependent DNA repair (PubMed:<a href="http://www.uniprot.org/citations/19837670" target="\_blank">19837670</a>). 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

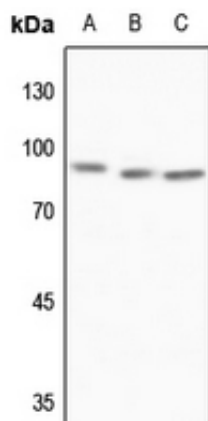
#### Anti-MTA1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

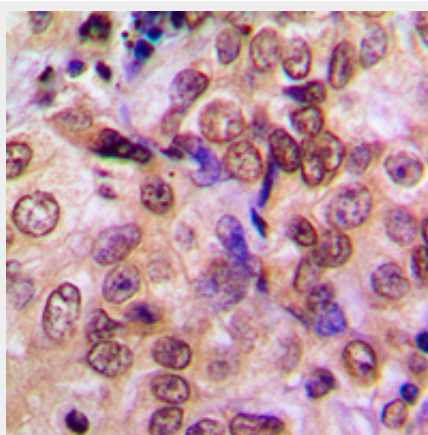
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Anti-MTA1 Antibody - Images





Western blot analysis of MTA1 expression in HEK293T (A), HeLa (B), HGC27 (C) whole cell lysates.



Immunohistochemical analysis of MTA1 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

#### **Anti-MTA1 Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human MTA1. The exact sequence is proprietary.