

Rabbit MTA1 Polyclonal Antibody | anti-MTA1 antibody

MTA1 Antibody

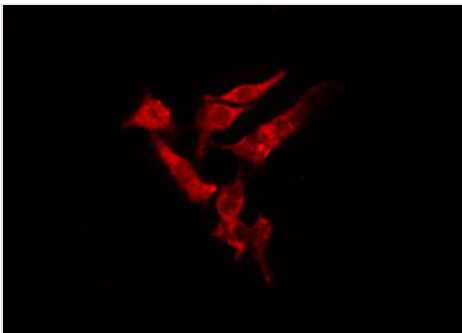
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA321033	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

MTA1; Polyclonal Antibody; MTA1 Antibody; Metastasis associated 1; Metastasis associated gene 1; Metastasis associated gene 1 protein; Metastasis associated protein; Metastasis associated protein MTA 1; Metastasis associated protein MTA1; Metastasis-associated protein MTA1; MTA 1; MTA1_HUMAN; anti-MTA1 antibody

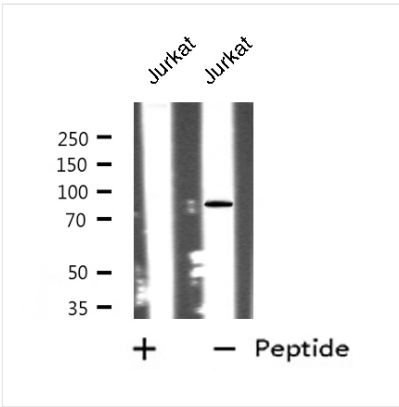
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	MTA1 antibody detects endogenous levels of MTA1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	430
Applicable Applications for anti-MTA1 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide derived from human MTA1
Subcellular Location	Cytoplasm and Nucleus.
Tissue Specificity	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.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IF (Immunofluorescence)

AAA321033 staining HeLa by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



WB (Western Blot)

Western blot analysis on Jurkat cell lysate using MTA1 Antibody

ADDITIONAL INFORMATION

Related Product Information for anti-MTA1 antibody

Description: 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.

Function: Transcriptional coregulator which can act as both a transcriptional corepressor and coactivator. As a part of the histone-deacetylase multiprotein complex (NuRD), regulates transcription of its targets by modifying the acetylation status of the target chromatin and cofactor accessibility to the target DNA. In conjunction with other components of NuRD, acts as a transcriptional corepressor of BRCA1, ESR1, TFF1 and CDKN1A. Acts as a transcriptional coactivator of BCAS3, PAX5 and SUMO2, independent of the NuRD complex. Stimulates the expression of WNT1 by inhibiting the expression of its transcriptional corepressor SIX3. Regulates p53-dependent and-independent DNA repair processes following genotoxic stress. Regulates the stability and function of p53/TP53 by inhibiting its ubiquitination by COP1 and MDM2 thereby regulating the p53-dependent DNA repair. Plays an important role in tumorigenesis, tumor invasion, and metastasis. Involved in the epigenetic regulation of ESR1 expression in breast cancer in a TFAP2C, IFI16 and HDAC4/5/6-dependent manner. 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. Positively regulates the CLOCK-ARNTL/BMAL1 heterodimer mediated transcriptional activation of its own transcription and the transcription of CRY1. Regulates deacetylation of ARNTL/BMAL1 by regulating SIRT1 expression, resulting in derepressing CRY1-mediated transcription repression. Isoform Short binds to ESR1 and sequesters it in the cytoplasm and enhances its non-genomic responses. With TFCP2L1, promotes establishment and maintenance of pluripotency in embryonic stem cells (ESCs) and inhibits endoderm differentiation (By similarity).

Subunit Structure: Component of the nucleosome-remodeling and histone-deacetylase multiprotein complex (NuRD). Interacts with HDAC1 and ITGB3BP/CENPR. Binds to CSNK1G2 in the cytoplasm. Interacts with NACC2. Interacts with ARNTL/BMAL1 and CLOCK. Interacts with EP300, TFAP2C, IFI16, TPR, HDAC2, UBE2I/UBC9, PIAS1, PIAS3, PIAS4, p53/TP53, MDM2, COP1, SUMO1, SUMO2, SENP1 and SENP2. Interacts with SIX3; facilitates the binding of SIX3 to the core DNA motif of SIX3 promoter (By similarity). Interacts with TFCP2L1; which is indispensable for TFCP2L1-mediated self-renewal-promoting effect and endoderm-inhibiting action (By similarity).

Post-translational Modifications: Phosphorylation by CSNK1G2/CK1 triggered by estrogen enhances corepression of estrogen receptor (ER). Acetylation is essential for its transcriptional coactivator activity. Sumoylation positively regulates its transcriptional corepressor activity but does not affect the protein stability. Sumoylated preferentially by SUMO2 or SUMO3 than SUMO1. Sumoylation is enhanced by PIAS1/3/4 and preferentially sumoylated by SUMO2 in the presence of PIAS1/3/4. Desumoylated by SENP1. Ubiquitinated by COP1, which leads to proteasomal degradation.

Similarity: Isoform Short contains a Leu-Arg-Ile-Leu-Leu motif (ER binding motif).

NCBI AND UNIPROT INFORMATION

NCBI GI #	322506112
NCBI GeneID	9112
NCBI Accession #	NP_001190187.1
NCBI GenBank Nucleotide #	NM_001203258.1
UniProt Accession #	Q13330; Q86SW2; Q8NFI8; Q96GI8; A5PLK4
Molecular Weight	Observed: 80 kDa Predicted: 81 kDa
NCBI Official Full Name	metastasis-associated protein MTA1 isoform MTA1s
NCBI Official Synonym Full Names	metastasis associated 1
NCBI Official Symbol	MTA1
NCBI Protein Information	metastasis-associated protein MTA1
UniProt Protein Name	Metastasis-associated protein MTA1
UniProt Gene Name	MTA1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/mta1-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/321033>