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Anti-MTA1 Antibody

Catalog # ABO10802

Product Information

Application	WB, IHC-P, IHC-F
Primary Accession	Q13330
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Metastasis-associated protein MTA1(MTA1) detection. Tested with WB, IHC-P, IHC-F in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	9112
Other Names	Metastasis-associated protein MTA1, MTA1
Calculated MW	80786
Application Details	Immunohistochemistry(Frozen Section), 0.5-1 □g/ml, Mouse, Rat, Human Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 □g/ml, Human, Rat, Mouse
Subcellular Localization	Isoform Short: Cytoplasm.
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. .
Source	Eukaryota
Protein Name	Metastasis-associated protein MTA1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human MTA1(676-696aa ETKRAARRPYKPIALRQSQAL), identical to the related mouse and rat sequences.

Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Contains 1 BAH domain.

Protein Information

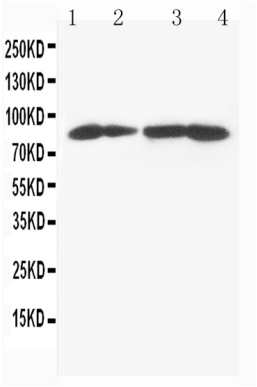
Name	MTA1
Function	Transcriptional coregulator which can act as both a transcriptional corepressor and coactivator (PubMed:16617102, PubMed:17671180, PubMed:17922032, PubMed:21965678, PubMed:24413532). Acts as a component of the histone deacetylase NuRD complex which participates in the remodeling of 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

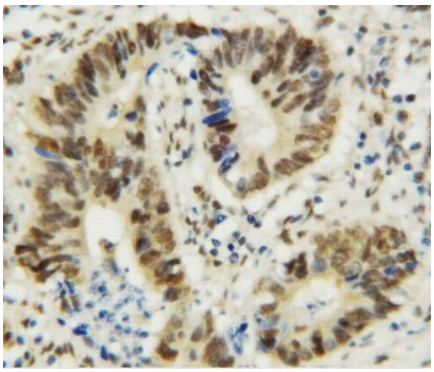
Metastasis-associated protein MTA1 is a protein that in humans is encoded by the MTA1 gene. This gene encodes a protein that was identified in a screen for genes expressed in metastatic cells, specifically, mammary adenocarcinoma cell lines. Expression of this gene has been correlated with the metastatic

potential of at least two types of carcinomas although it is also expressed in many normal tissues.By fluorescence in situ hybridization, mapped the MTA1gene to chromosome 14q32.3. MTA1 is a component of the chromatin remodeling complex that influences gene transcription by modulating target gene chromatin. MTA1 is widely upregulated in many carcinomas.

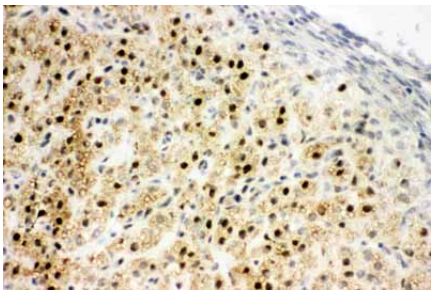
Images



Anti-MTA1 antibody, ABO10802, Western blottingLane 1: MCF-7 Cell Lysate Lane 2: HELA Cell LysateLane 3: JURKAT Cell Lysate Lane 4: CEM Cell Lysate



Anti-MTA1 antibody, ABO10802, IHC(P)IHC(P): Human Rectal Cancer Tissue



Anti-MTA1 antibody, ABO10802, IHC(F)IHC(F): Rat Ovary Tissue

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