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Anti-MTA1 Antibody

Catalog # AP95962

Product Information

Application	WB, FC
Primary Accession	Q13330
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	80786

Additional Information

Gene ID	9112
Other Names	Metastasis-associated protein MTA1
Target/Specificity	Recombinant fusion protein of human MTA1 expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) FC~~FC (1/100 - 1/200)
Format	Mouse IgG2b. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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).

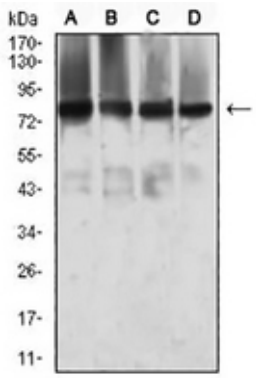
Cellular Location

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).

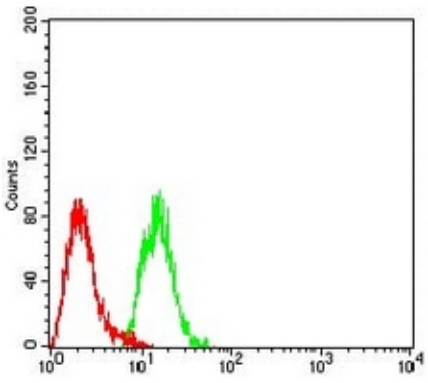
Tissue Location

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

Images



Western blot analysis of MTA1 expression in SW480 (A), T47D (B), MCF7 (C), COS7 (D) whole cell lysates. (Predicted band size: 81 kD; Observed band size: 80 kD)



Flow cytometric analysis of HeLa cells using Anti-MTA1 Antibody (green) and negative control (red).

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