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MYSM1 Polyclonal Antibody

Catalog # AP71140

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	Q5VVJ2
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	95032

Additional Information

Gene ID	114803
Other Names	MYSM1; KIAA1915; Histone H2A deubiquitinase MYSM1; 2A-DUB; Myb-like; SWIRM and MPN domain-containing protein 1
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

Name	MYSM1
Synonyms	KIAA1915
Function	Metalloprotease with deubiquitinase activity that plays important regulator roles in hematopoietic stem cell function, blood cell production and immune response (PubMed:24062447, PubMed:26220525, PubMed:28115216). Participates in the normal programming of B-cell responses to antigen after the maturation process (By similarity). Within the cytoplasm, plays critical roles in the repression of innate immunity and autoimmunity (PubMed:33086059). Removes 'Lys-63'-linked polyubiquitins from TRAF3 and TRAF6 complexes (By similarity). Attenuates NOD2-mediated inflammation and tissue injury by promoting 'Lys-63'-linked deubiquitination of RIPK2 component (By similarity). Suppresses the CGAS-STING1 signaling pathway by cleaving STING1 'Lys- 63'-linked ubiquitin chains (PubMed:33086059). In the nucleus, acts as a hematopoietic transcription regulator derepressing a range of genes essential for normal stem cell differentiation including EBF1 and PAX5 in B-cells, ID2 in NK-cell progenitor or FLT3 in dendritic cell precursors

(PubMed:24062447). Deubiquitinates monoubiquitinated histone H2A, a specific tag for epigenetic transcriptional repression, leading to dissociation of histone H1 from the nucleosome (PubMed:17707232).

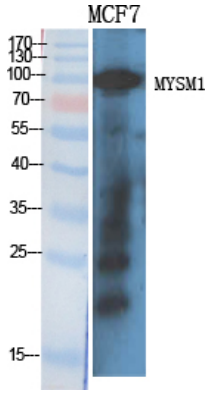
Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00624, ECO:0000269|PubMed:17707232}. Cytoplasm {ECO:0000250|UniProtKB:Q69Z66} Note=Localizes to the cytoplasm in response to bacterial infection {ECO:0000250|UniProtKB:Q69Z66}

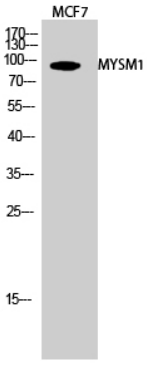
Background

Metalloprotease that specifically deubiquitinates monoubiquitinated histone H2A, a specific tag for epigenetic transcriptional repression, thereby acting as a coactivator. Preferentially deubiquitinates monoubiquitinated H2A in hyperacetylated nucleosomes. Deubiquitination of histone H2A leads to facilitate the phosphorylation and dissociation of histone H1 from the nucleosome. Acts as a coactivator by participating in the initiation and elongation steps of androgen receptor (AR)-induced gene activation. Required for correct regulation of hematopoiesis and lymphocyte differentiation (PubMed:28115216, PubMed:26220525).

Images

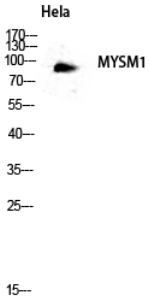


Western Blot analysis of various cells using MYSM1 Polyclonal Antibody diluted at 1：2000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).



Western Blot analysis of MCF7 cells using MYSM1 Polyclonal Antibody diluted at 1：2000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).

Western blot analysis of Hela lysis using MYSM1 antibody. Antibody was diluted at 1:2000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).



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