

# MYSM1 Polyclonal Antibody

Catalog # AP71140

## Product Information

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|--------------------------|------------------------|
| <b>Application</b>       | WB, IHC-P, IF, ICC, E  |
| <b>Primary Accession</b> | <a href="#">Q5VVI2</a> |
| <b>Reactivity</b>        | Human, Rat, Mouse      |
| <b>Host</b>              | Rabbit                 |
| <b>Clonality</b>         | Polyclonal             |
| <b>Calculated MW</b>     | 95032                  |

## Additional Information

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|---------------------------|--|
| <b>Gene ID</b>            | 114803   |
| <b>Other Names</b>        | MYSM1; KIAA1915; Histone H2A deubiquitinase MYSM1; 2A-DUB; Myb-like; SWIRM and MPN domain-containing protein 1   |
| <b>Dilution</b>           | 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 |
| <b>Format</b>             | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.  |
| <b>Storage Conditions</b> | -20°C  |

## Protein Information

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|-----------------|---|
| <b>Name</b>     | MYSM1   |
| <b>Synonyms</b> | KIAA1915  |
| <b>Function</b> | Metalloprotease with deubiquitinase activity that plays important regulator roles in hematopoietic stem cell function, blood cell production and immune response (PubMed: <a href="#">24062447</a> , PubMed: <a href="#">26220525</a> , PubMed: <a href="#">28115216</a> ). 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: <a href="#">33086059</a> ). 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: <a href="#">33086059</a> ). 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](#)).

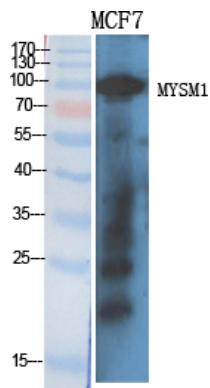
## Cellular Location

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}

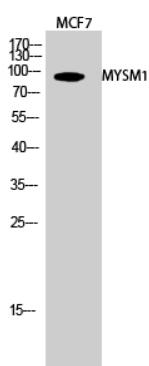
## Background

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



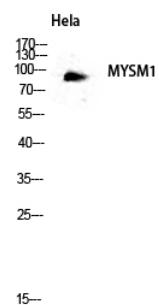
Western Blot analysis of various cells using MYSM1 Polyclonal Antibody diluted at 1 : 2000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).



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).



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