

### MYSM1 Antibody (N-term) Blocking Peptide Synthetic peptide

Catalog # BP10517a

# Specification

# MYSM1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Other Accession <u>O5VVJ2</u> NP 001078956.1

# MYSM1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 114803

Other Names Histone H2A deubiquitinase MYSM1, 2A-DUB, 3419-, Myb-like, SWIRM and MPN domain-containing protein 1, MYSM1, KIAA1915

### Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions** 

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# MYSM1 Antibody (N-term) Blocking Peptide - 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:<a

href="http://www.uniprot.org/citations/24062447" target="\_blank">24062447</a>, PubMed:<a href="http://www.uniprot.org/citations/26220525" target="\_blank">26220525</a>, PubMed:<a href="http://www.uniprot.org/citations/28115216" target="\_blank">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="http://www.uniprot.org/citations/33086059" target="\_blank">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="http://www.uniprot.org/citations/33086059" target="\_blank">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:<a href="http://www.uniprot.org/citations/24062447" target="\_blank">24062447</a>). Deubiquitinates monoubiquitinated histone H2A, a specific tag for epigenetic transcriptional repression, leading to dissociation of histone H1 from the nucleosome (PubMed:<a href="http://www.uniprot.org/citations/17707232" target="\_blank">17707232</a>).

#### **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}

# MYSM1 Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

<u>Blocking Peptides</u>

### MYSM1 Antibody (N-term) Blocking Peptide - Images

# MYSM1 Antibody (N-term) Blocking Peptide - 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.

# MYSM1 Antibody (N-term) Blocking Peptide - References

Dephoure, N., et al. Proc. Natl. Acad. Sci. U.S.A. 105(31):10762-10767(2008)Zhu, P., et al. Mol. Cell 27(4):609-621(2007)Matsuoka, S., et al. Science 316(5828):1160-1166(2007)Yoneyama, M., et al. J. Mol. Biol. 369(1):222-238(2007)