

**MYST1 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1113a**

**Specification**

**MYST1 Antibody - Product Information**

Application	<b>WB, IHC, IF</b>
Primary Accession	<a href="#">O9H7Z6</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG2b</b>
Calculated MW	<b>53kDa KDa</b>

**Description**

MYST1 (MYST histone acetyltransferase 1, MOF) belongs to the MYST family of histone acetyltransferases, which are employed in the cell to bring about transcriptional regulation. The MYST family includes MYST1, is named for the founding members MOZ, yeast YBF2 and SAS2, and TIP60. All members of this family contain a MYST region of about 240 amino acids with a canonical acetyl-CoA-binding site and a C2HC-type zinc finger motif. Most MYST proteins also have a chromodomain involved in protein-protein interactions and targeting transcriptional regulators to chromatin. Although MOF is expressed in both males and females, it associates with the X chromosome only in males. MOF contains a zinc-finger domain that is used to contact the globular part of the nucleosome and histone H4. The carboxy terminal domain of human MOF also has histone acetyltransferase activity directed against histones H3 and H2A, a characteristic shared with other MYST family histone

**Immunogen**

Purified recombinant fragment of human MYST1 expressed in *E. Coli*.

**Formulation**

Ascitic fluid containing 0.03% sodium azide.

**MYST1 Antibody - Additional Information**

**Gene ID 84148**

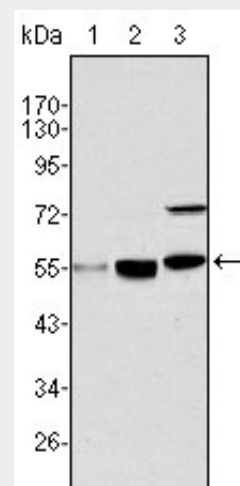


Figure 1: Western blot analysis using MYST1 mouse mAb against HeLa (1), HepG2 (2) and SMMC-7721 (3) cell lysate.

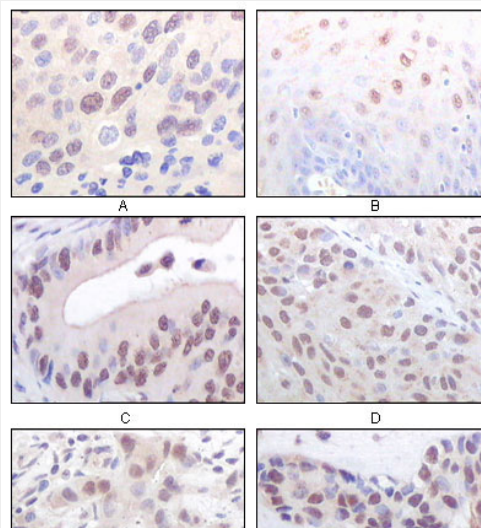


Figure 2: Immunohistochemical analysis of paraffin-embedded human esophageal squamous cell carcinoma (A), normal esophagus epithelium (B), rectum adenocarcinoma (C), lung squamous cell carcinoma (D), breast infiltrating carcinoma (E), and breast infiltrating carcinoma (F) tissues, showing nuclear localization using MOF/MYST1 mouse mAb with DAB staining.

**Other Names**

Histone acetyltransferase KAT8, 2.3.1.48,  
Lysine acetyltransferase 8, MOZ,  
YBF2/SAS3, SAS2 and TIP60 protein 1,  
MYST-1, hMOF, KAT8, MOF, MYST1

**Dilution**

WB~~1/500 - 1/2000  
IHC~~1/200 - 1/1000  
IF~~1/200 - 1/1000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

MYST1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**MYST1 Antibody - Protein Information**

**Name** KAT8

**Synonyms** MOF, MYST1

**Function**

Histone acetyltransferase which may be involved in transcriptional activation (PubMed:<a href="http://www.uniprot.org/citations/12397079" target="\_blank">12397079</a>, PubMed:<a href="http://www.uniprot.org/citations/22020126" target="\_blank">22020126</a>). May influence the function of ATM (PubMed:<a href="http://www.uniprot.org/citations/15923642" target="\_blank">15923642</a>). As part of the MSL complex it is involved in acetylation of nucleosomal histone H4 producing specifically H4K16ac (PubMed:<a href="http://www.uniprot.org/citations/16227571" target="\_blank">16227571</a>, PubMed:<a href="http://www.uniprot.org/citations/16543150" target="\_blank">16543150</a>, PubMed:<a href="http://www.uniprot.org/citations/21217699" target="\_blank">21217699</a>, PubMed:<a href="http://www.uniprot.org/citations/22547026" target="\_blank">22547026</a>, PubMed:<a href="http://www.uniprot.org/citations/22020126" target="\_blank">22020126</a>)

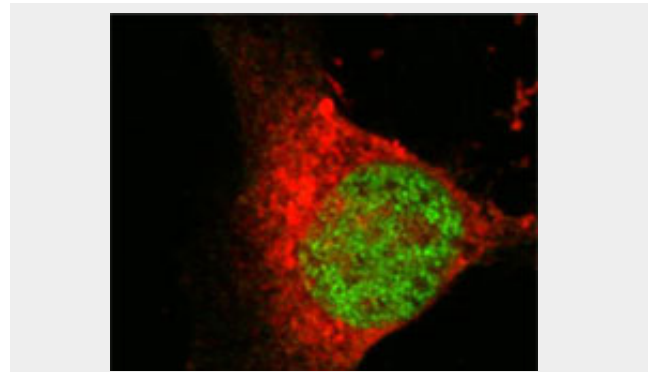


Figure 3: Confocal immunofluorescence analysis of Eca 109 cells using MOF/MYST1 mouse mAb (green), showing nuclear localization.

**MYST1 Antibody - References**

1. Sterner, D.E., et al. Microbiol. Mol. Biol 2000 Rev. 64: 435-459.
2. Neal, K.C., et al. Biochim. Biophys. 2000 Acta 1490: 170-174.
3. Akhtar, A., et al. EMBO 2001 Rep. 2: 113-118.

target="\_blank">22020126</a>). As part of the NSL complex it may be involved in acetylation of nucleosomal histone H4 on several lysine residues (PubMed:<a href="http://www.uniprot.org/citations/20018852" target="\_blank">20018852</a>, PubMed:<a href="http://www.uniprot.org/citations/22547026" target="\_blank">22547026</a>). That activity is less specific than the one of the MSL complex (PubMed:<a href="http://www.uniprot.org/citations/20018852" target="\_blank">20018852</a>, PubMed:<a href="http://www.uniprot.org/citations/22547026" target="\_blank">22547026</a>). Can also acetylate TP53/p53 at 'Lys-120'.

**Cellular Location**

Nucleus. Chromosome

**MYST1 Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)