

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

MYST1 Antibody - Product Information

Application	WB, IHC, IF
Primary Accession	Q9H7Z6
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Calculated MW	53kDa KDa

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

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:12397079, PubMed:22020126). May influence the function of ATM (PubMed:15923642). As part of the MSL complex it is involved in acetylation of nucleosomal histone H4 producing specifically H4K16ac (PubMed:16227571, PubMed:16543150, PubMed:21217699, PubMed:22547026, PubMed:22020126). As part of the NSL complex it may be involved in acetylation of nucleosomal histone H4 on several lysine residues (PubMed:20018852, PubMed:22547026). That activity is less specific than the one of the MSL complex (PubMed:20018852, PubMed:22547026). Can also acetylate TP53/p53 at 'Lys-120'.

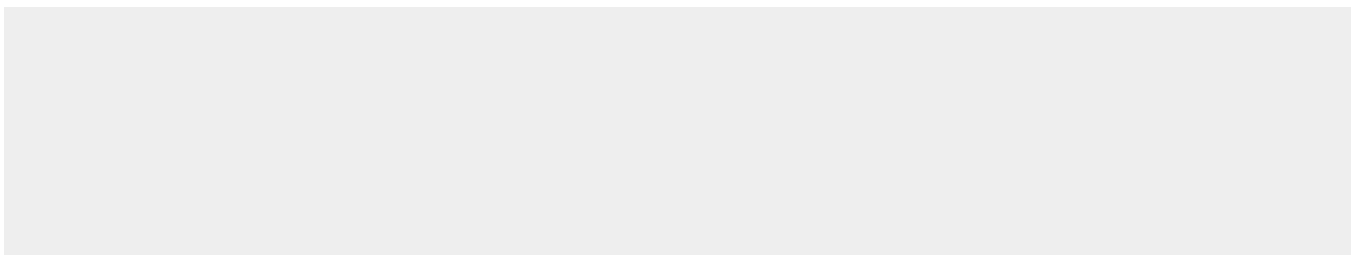
Cellular Location

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](#)

MYST1 Antibody - Images

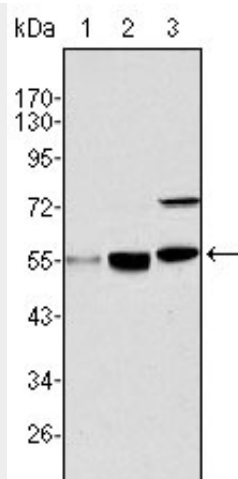


Figure 1: Western blot analysis using MYST1 mouse mAb against HeLa (1), HepG2 (2) and SMMC-7721 (3) cell lysate.

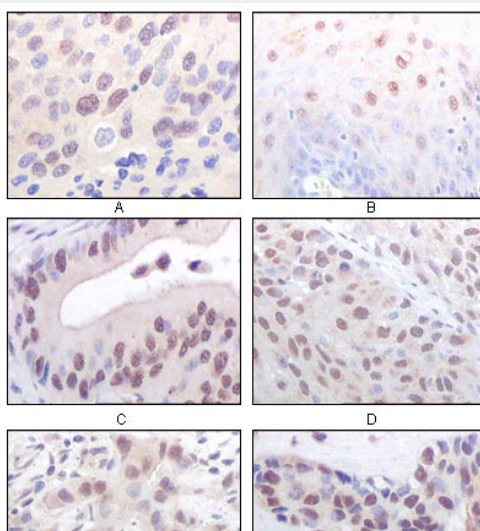


Figure 2: Immunohistochemical analysis of paraffin-embedded human esophageal squamous cell carcinoma (A), normal esophagus epithelium (B), rectum adenocarcinoma (C), lung squamous cell carcinoma (D), breast infiltrating carcinoma (E), and breast infiltrating carcinoma (F) tissues, showing nuclear localization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

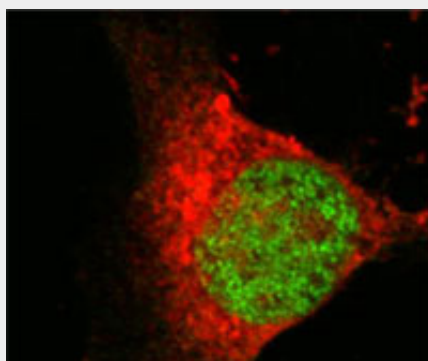


Figure 3: Confocal immunofluorescence analysis of Eca 109 cells using MOF/MYST1 mouse mAb (green), showing nuclear localization.

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.