

KAT8 / MYST1 / MOF Antibody
Rabbit mAb
Catalog # AP91802

Specification

KAT8 / MYST1 / MOF Antibody - Product Information

Application	WB, IHC, FC, ICC, IP
Primary Accession	Q9H7Z6
Reactivity	Rat
Clonality	Monoclonal
Other Names	
hMOF; MOF; MOZ; MYST1; SAS2; SAS3; YBF2; YBF2/SAS3; ZC2HC8;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	52403 Da

KAT8 / MYST1 / MOF Antibody - Additional Information

Dilution	WB~~1:1000 IHC~~1:100~500 FC~~1:10~50 ICC~~N/A IP~~N/A
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human KAT8 / MYST1 / MOF
Description	Histone acetyltransferase which may be involved in transcriptional activation. May influence the function of ATM.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

KAT8 / MYST1 / MOF Antibody - Protein Information

Name KAT8 {ECO:0000303|PubMed:33657400, ECO:0000312|HGNC:HGNC:17933}

Function

Histone acetyltransferase that catalyzes histone H4 acetylation at 'Lys-5'- and 'Lys-8' (H4K5ac and H4K8ac) or 'Lys-16' (H4K16ac), depending on the context (PubMed:12397079, PubMed:16227571, PubMed:16543150, PubMed:20018852, PubMed:21217699, PubMed:22020126, PubMed:<a

[22547026](http://www.uniprot.org/citations/22547026), PubMed: [31794431](http://www.uniprot.org/citations/31794431), PubMed: [33837287](http://www.uniprot.org/citations/33837287)). Catalytic component of the MSL histone acetyltransferase complex, a multiprotein complex that mediates the majority of histone H4 acetylation at 'Lys-16' (H4K16ac), an epigenetic mark that prevents chromatin compaction (PubMed: [12397079](http://www.uniprot.org/citations/12397079) target= "_blank">12397079, PubMed: [16227571](http://www.uniprot.org/citations/16227571) target= "_blank">16227571, PubMed: [16543150](http://www.uniprot.org/citations/16543150) target= "_blank">16543150, PubMed: [21217699](http://www.uniprot.org/citations/21217699) target= "_blank">21217699, PubMed: [22020126](http://www.uniprot.org/citations/22020126) target= "_blank">22020126, PubMed: [22547026](http://www.uniprot.org/citations/22547026) target= "_blank">22547026, PubMed: [33657400](http://www.uniprot.org/citations/33657400) target= "_blank">33657400, PubMed: [33837287](http://www.uniprot.org/citations/33837287) target= "_blank">33837287). H4K16ac constitutes the only acetylation mark intergenerationally transmitted and regulates key biological processes, such as oogenesis, embryonic stem cell pluripotency, hematopoiesis or glucose metabolism (By similarity). The MSL complex is required for chromosome stability and genome integrity by maintaining homeostatic levels of H4K16ac (PubMed: [33837287](http://www.uniprot.org/citations/33837287) target= "_blank">33837287). The MSL complex is also involved in gene dosage by promoting up-regulation of genes expressed by the X chromosome (By similarity). X up-regulation is required to compensate for autosomal biallelic expression (By similarity). The MSL complex also participates in gene dosage compensation by promoting expression of Tsix non-coding RNA (By similarity). As part of the NSL histone acetyltransferase complex, catalyzes histone H4 acetylation at 'Lys-5'- and 'Lys-8' (H4K5ac and H4K8ac) at transcription start sites and promotes transcription initiation (PubMed: [20018852](http://www.uniprot.org/citations/20018852) target= "_blank">20018852, PubMed: [22547026](http://www.uniprot.org/citations/22547026) target= "_blank">22547026, PubMed: [33657400](http://www.uniprot.org/citations/33657400) target= "_blank">33657400). The NSL complex also acts as a regulator of gene expression in mitochondria: KAT8 associates with mitochondrial DNA and controls expression of respiratory genes in an acetyltransferase- dependent mechanism (PubMed: [27768893](http://www.uniprot.org/citations/27768893) target= "_blank">27768893). Also functions as an acetyltransferase for non-histone targets, such as ALKBH5, COX17, IRF3, KDM1A/LSD1, LMNA, PAX7 or TP53/p53 (PubMed: [17189187](http://www.uniprot.org/citations/17189187) target= "_blank">17189187, PubMed: [19854137](http://www.uniprot.org/citations/19854137) target= "_blank">19854137, PubMed: [37369679](http://www.uniprot.org/citations/37369679) target= "_blank">37369679). Acts as an inhibitor of antiviral immunity by acetylating IRF3, preventing IRF3 recruitment to promoters (By similarity). Acts as a regulator of asymmetric division in muscle stem cells by mediating acetylation of PAX7 (By similarity). As part of the NSL complex, acetylates TP53/p53 at 'Lys-120' (PubMed: [17189187](http://www.uniprot.org/citations/17189187) target= "_blank">17189187, PubMed: [19854137](http://www.uniprot.org/citations/19854137) target= "_blank">19854137). Acts as a regulator of epithelial-to-mesenchymal transition as part of the NSL complex by mediating acetylation of KDM1A/LSD1 (PubMed: [27292636](http://www.uniprot.org/citations/27292636) target= "_blank">27292636). The NSL complex is required for nuclear architecture maintenance by mediating acetylation of LMNA (By similarity). Promotes mitochondrial integrity by catalyzing acetylation of COX17 (By similarity). In addition to protein acetyltransferase activity, able to mediate protein propionylation (PubMed: [29321206](http://www.uniprot.org/citations/29321206) target= "_blank">29321206).

Cellular Location

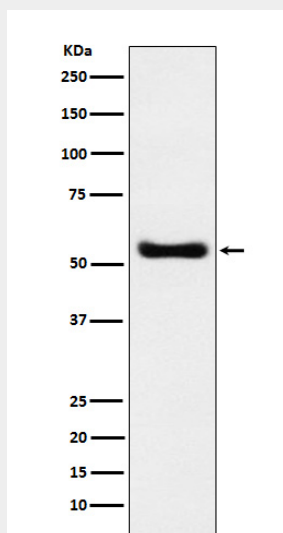
Nucleus. Chromosome Mitochondrion. Note=Translocated into the nucleus via its association with importin-alpha-1 (KPNA2) (PubMed:28991411). As part of the NSL complex, associates with the proximal part of promoters and transcription start sites (PubMed:33657400). As part of the MSL complex, associates with gene bodies (By similarity). Also localizes to mitochondria; associates with mitochondrial DNA and regulates mitochondrial gene expression (PubMed:27768893).
{ECO:0000250|UniProtKB:Q9D1P2, ECO:0000269|PubMed:27768893, ECO:0000269|PubMed:28991411, ECO:0000269|PubMed:33657400}

KAT8 / MYST1 / MOF 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](#)

KAT8 / MYST1 / MOF Antibody - Images



Western blot analysis of KAT8 / MYST1 / MOF expression in HeLa cell lysate.