

KAT1 / HAT1 Antibody
Rabbit mAb
Catalog # AP92128

Specification

KAT1 / HAT1 Antibody - Product Information

Application	WB, IHC, FC, ICC, IP
Primary Accession	O14929
Reactivity	Rat
Clonality	Monoclonal
Other Names	
hat1; KAT1;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	49513 Da

KAT1 / HAT1 Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human KAT1 / HAT1
Description	Acetylates soluble but not nucleosomal histone H4 at 'Lys-5' (H4K5ac) and 'Lys-12' (H4K12ac) and, to a lesser extent, acetylates histone H2A at 'Lys-5' (H2AK5ac). Has intrinsic substrate specificity that modifies lysine in recognition sequence GXGKXG.
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.

KAT1 / HAT1 Antibody - Protein Information

Name HAT1

Synonyms KAT1

Function

Histone acetyltransferase that plays a role in different biological processes including cell cycle progression, glucose metabolism, histone production or DNA damage repair (PubMed: [20953179](http://www.uniprot.org/citations/20953179), PubMed: [23653357](http://www.uniprot.org/citations/23653357), PubMed: [31278053](http://www.uniprot.org/citations/31278053), PubMed: [32081014](http://www.uniprot.org/citations/32081014)). Coordinates histone production and acetylation via H4 promoter binding (PubMed: [32081014](#))

<http://www.uniprot.org/citations/31278053> target="_blank">31278053). Acetylates histone H4 at 'Lys-5' (H4K5ac) and 'Lys-12' (H4K12ac) and, to a lesser extent, histone H2A at 'Lys-5' (H2AK5ac) (PubMed:11585814, PubMed:22615379). Drives H4 production by chromatin binding to support chromatin replication and acetylation. Since transcription of H4 genes is tightly coupled to S-phase, plays an important role in S-phase entry and progression (PubMed:31278053). Promotes homologous recombination in DNA repair by facilitating histone turnover and incorporation of acetylated H3.3 at sites of double-strand breaks (PubMed:23653357). In addition, acetylates other substrates such as chromatin-related proteins (PubMed:32081014). Acetylates also RSAD2 which mediates the interaction of ubiquitin ligase UBE4A with RSAD2 leading to RSAD2 ubiquitination and subsequent degradation (PubMed:31812350).

Cellular Location

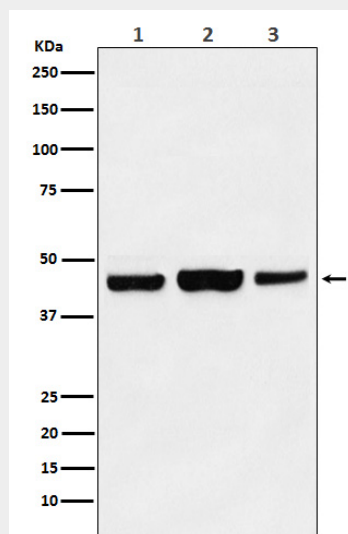
[Isoform A]: Nucleus matrix Mitochondrion

KAT1 / HAT1 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](#)

KAT1 / HAT1 Antibody - Images



Western blot analysis of KAT1 / HAT1 expression in (1) MCF7 cell lysate; (2) NIH/3T3 cell lysate; (3) C6 cell lysate.