

KAT1 Rabbit mAb

Catalog # AP78011

Product Information

Application	WB, IHC-P, IF, FC, ICC, IP
Primary Accession	O14929
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Immunogen	A synthesized peptide derived from human KAT1 / HAT1
Purification	Affinity Chromatography
Calculated MW	49541

Additional Information

Gene ID	8520
Other Names	HAT1
Dilution	WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 FC~~1:10~50 ICC~~N/A IP~~N/A
Format	Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

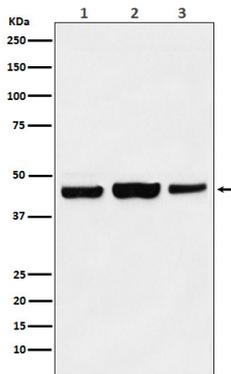
Name	HAT1
Synonyms	KAT1
Function	Histone acetyltransferase that plays a role in different biological processes including cell cycle progression, glucose metabolism, histone production or DNA damage repair (PubMed: 20953179 , PubMed: 23653357 , PubMed: 31278053 , PubMed: 32081014). Coordinates histone production and acetylation via H4 promoter binding (PubMed: 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](#)). Also acetylates RSAD2 which mediates the interaction of ubiquitin ligase UBE4A with RSAD2 leading to RSAD2 ubiquitination and subsequent degradation (PubMed:[31812350](#)). In addition to protein acetyltransferase, can use different acyl-CoA substrates, such as 2-methylpropenoyl-CoA (methacryl-CoA), and is able to mediate histone methacrylation (PubMed:[34961760](#)).

Cellular Location

[Isoform A]: Nucleus matrix Mitochondrion

Images



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