

# KAT1 Rabbit mAb

Catalog # AP74888

## Product Information

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<b>Application</b>	WB, IHC-P, IP
<b>Primary Accession</b>	<a href="#">O14929</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Monoclonal Antibody
<b>Calculated MW</b>	49541

## Additional Information

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<b>Gene ID</b>	8520
<b>Other Names</b>	HAT1
<b>Dilution</b>	WB~~1/500-1/1000 IHC-P~~N/A IP~~N/A
<b>Format</b>	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

## Protein Information

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<b>Name</b>	HAT1
<b>Synonyms</b>	KAT1
<b>Function</b>	<p>Histone acetyltransferase that plays a role in different biological processes including cell cycle progression, glucose metabolism, histone production or DNA damage repair (PubMed:<a href="#">20953179</a>, PubMed:<a href="#">23653357</a>, PubMed:<a href="#">31278053</a>, PubMed:<a href="#">32081014</a>). Coordinates histone production and acetylation via H4 promoter binding (PubMed:<a href="#">31278053</a>). Acetylates histone H4 at 'Lys-5' (H4K5ac) and 'Lys-12' (H4K12ac) and, to a lesser extent, histone H2A at 'Lys-5' (H2AK5ac) (PubMed:<a href="#">11585814</a>, PubMed:<a href="#">22615379</a>). 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:<a href="#">31278053</a>). Promotes homologous recombination in DNA repair by facilitating histone turnover and incorporation of acetylated H3.3 at sites of double-strand breaks (PubMed:<a href="#">23653357</a>). In addition, acetylates other substrates such as chromatin-related proteins (PubMed:<a href="#">32081014</a>). Also acetylates RSAD2 which mediates the interaction of ubiquitin ligase UBE4A with RSAD2 leading to RSAD2 ubiquitination and subsequent degradation (PubMed:<a href="#">31812350</a>). In</p>

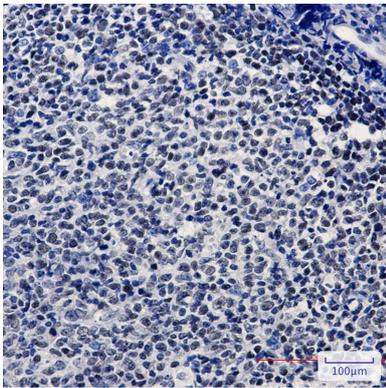
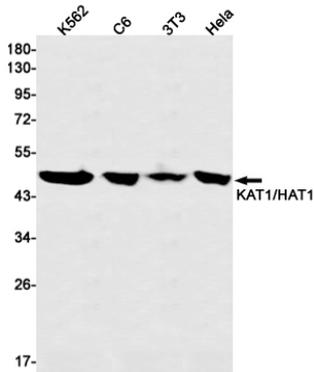
addition to protein acetyltransferase, can use different acyl-CoA substrates, such as 2-methylpropenoyl-CoA (methacryl-CoA), and is able to mediate histone methacrylation (PubMed:[34961760](https://pubmed.ncbi.nlm.nih.gov/34961760/)).

## Cellular Location

[Isoform A]: Nucleus matrix Mitochondrion

## Images

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