

KAT1 Rabbit mAb

Catalog # AP75646

Product Information

Application WB, IHC-P, IHC-F, IP, ICC

Primary Accession <u>014929</u>

Reactivity Human, Mouse, Rat

Host Rabbit

Clonality Monoclonal Antibody

Calculated MW 49541

Additional Information

Gene ID 8520

Other Names HAT1

Dilution WB~~1/500-1/1000 IHC-P~~N/A IHC-F~~N/A IP~~N/A ICC~~N/A

Format Liquid

Protein Information

Name HAT1

Synonyms KAT1

Function Histone acetyltransferase that plays a role in different biological processes

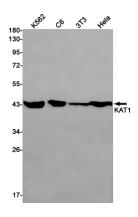
including cell cycle progression, glucose metabolism, histone production or

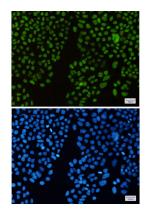
DNA damage repair (PubMed: <u>20953179</u>, PubMed: <u>23653357</u>,

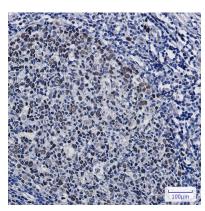
PubMed:31278053, PubMed:32081014). Coordinates histone production and acetylation via H4 promoter binding (PubMed:31278053). Acetylates histone H4 at 'Lys-5' (H4K5ac) and 'Lys-12' (H4K12ac) and, to a lesser extent, histone H2A at 'Lys-5' (H2AK5ac) (PubMed:11585814, PubMed:22615379). Drives H4 production 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:<u>23653357</u>). In addition, acetylates other substrates such as chromatin-related proteins (PubMed:<u>32081014</u>). Also acetylates RSAD2 which mediates the interaction of ubiquitin ligase UBE4A with RSAD2 leading to RSAD2 ubiquitination and subsequent degradation (PubMed:<u>31812350</u>).

Cellular Location [Isoform A]: Nucleus matrix Mitochondrion







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