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Anti-HAT1 Antibody

Rabbit polyclonal antibody to HAT1
Catalog # AP59745

Product Information

Application	WB
Primary Accession	O14929
Other Accession	Q8BY71
Reactivity	Human, Mouse, Rat, Monkey, Pig, Bovine, Drosophila
Host	Rabbit
Clonality	Polyclonal
Calculated MW	49541

Additional Information

Gene ID	8520
Other Names	KAT1; Histone acetyltransferase type B catalytic subunit; Histone acetyltransferase 1
Target/Specificity	Recognizes endogenous levels of HAT1 protein.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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

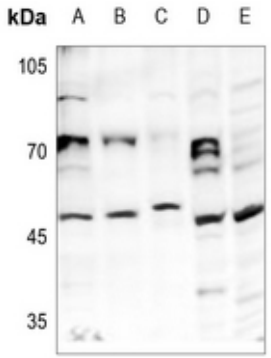
(PubMed:23653357). In addition, acetylates other substrates such as chromatin-related proteins (PubMed:32081014). Also acetylates RSAD2 which mediates the interaction of ubiquitin ligase UBE4A with RSAD2 leading to RSAD2 ubiquitination and subsequent degradation (PubMed:31812350).

Cellular Location [Isoform A]: Nucleus matrix Mitochondrion

Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human HAT1. The exact sequence is proprietary.

Images



Western blot analysis of HAT1 expression in EC9706 (A), SGC7901 (B), HCT116 (C), CT26 (D), PC12 (E) whole cell lysates.