产品名称：KAT7 / HBO1 / MYST2 (15C5) Rabbit Monoclonal Antibody
产品货号：AMRe12906

产品概述（Summary）

产品名称（Production Name）	KAT7 / HBO1 / MYST2 (15C5) Rabbit Monoclonal Antibody
描述（Description）	Recombinant rabbit monoclonal antibody
宿主（Host）	Rabbit
应用（Application）	WB,IHC,ICC/IF,IP
种属反应性（Reactivity）	Human,Mouse,Rat

产品性能（Performance）

偶联物（Conjugation）	Unconjugated
修饰（Modification）	Unmodified
同种型（Isotype）	IgG
克隆（Clonality）	Monoclonal
形式（Form）	Liquid
存放说明（Storage）	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
储存溶液（Buffer）	Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% New type preservative N and 0.05% protective protein.
纯化方式（Purification）	Affinity purification

免疫原信息（Immunogen）

基因名（Gene Name）	KAT7
别名（Alternative Names）	HBO1; HBOa; KAT7; MOZ; MYST 2; MYST protein 2; MYST2; SAS 2; SAS2 and TIP60 protein 2; TIP60 protein 2; YBF2/SAS3; ZC2HC7;
基因 ID（Gene ID）	11143.0
蛋白 ID（SwissProt ID）	O95251.Recombinant protein of human KAT7/Hbo1/MYST2

产品应用（Application）

稀释比（Dilution Ratio）	WB 1:1000-1:5000,IHC 1:100-1:200,ICC/IF 1:500-1:2000,IP 1:50-1:100
蛋白分子量（Molecular Weight）	71kDa

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研究背景（Background）

Component of the HBO1 complex which has a histone H4-specific acetyltransferase activity, a reduced activity toward histone H3 and is responsible for the bulk of histone H4 acetylation in vivo. Through chromatin acetylation it may regulate DNA replication and act as a coactivator of TP53-dependent transcription. Specifically represses AR-mediated transcription. Catalytic subunit of histone acetyltransferase HBO1 complexes, which specifically mediate acetylation of histone H3 at 'Lys-14' (H3K14ac), thereby regulating various processes, such as gene transcription, protein ubiquitination, immune regulation, stem cell pluripotent and self-renewal maintenance and embryonic development (PubMed:16387653, PubMed:21753189, PubMed:24065767, PubMed:26620551, PubMed:31767635, PubMed:31827282). Some complexes also catalyze acetylation of histone H4 at 'Lys-5', 'Lys-8' and 'Lys-12' (H4K5ac, H4K8ac and H4K12ac, respectively), regulating DNA replication initiation, regulating DNA replication initiation (PubMed:10438470, PubMed:19187766, PubMed:20129055, PubMed:24065767). Specificity of the HBO1 complexes is determined by the scaffold subunit: complexes containing BRPF scaffold (BRPF1, BRD1/BRPF2 or BRPF3) direct KAT7/HBO1 specificity towards H3K14ac, while complexes containing JADE (JADE1, JADE2 and JADE3) scaffold direct KAT7/HBO1 specificity towards histone H4 (PubMed:19187766, PubMed:20129055, PubMed:24065767, PubMed:26620551). H3K14ac promotes transcriptional elongation by facilitating the processivity of RNA polymerase II (PubMed:31827282). Acts as a key regulator of hematopoiesis by forming a complex with BRD1/BRPF2, directing KAT7/HBO1 specificity towards H3K14ac and promoting erythroid differentiation (PubMed:21753189). H3K14ac is also required for T-cell development (By similarity). KAT7/HBO1-mediated acetylation facilitates two consecutive steps, licensing and activation, in DNA replication initiation: H3K14ac facilitates the activation of replication origins, and histone H4 acetylation (H4K5ac, H4K8ac and H4K12ac) facilitates chromatin loading of MCM complexes, promoting DNA replication licensing (PubMed:10438470, PubMed:11278932, PubMed:<a href="http://www.uniprot.org/citations/18832067"

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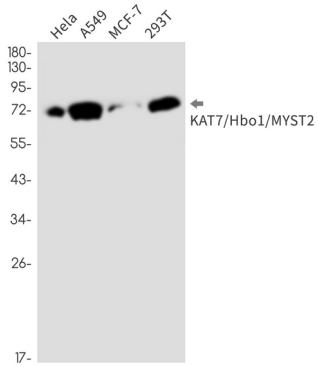
target="_blank">18832067, PubMed:19187766, PubMed:20129055, PubMed:21856198, PubMed:24065767, PubMed:26620551). Acts as a positive regulator of centromeric CENPA assembly: recruited to centromeres and mediates histone acetylation, thereby preventing centromere inactivation mediated by SUV39H1, possibly by increasing histone turnover/exchange (PubMed:27270040). Involved in nucleotide excision repair: phosphorylation by ATR in response to ultraviolet irradiation promotes its localization to DNA damage sites, where it mediates histone acetylation to facilitate recruitment of XPC at the damaged DNA sites (PubMed:28719581). Acts as an inhibitor of NF-kappa-B independently of its histone acetyltransferase activity (PubMed:16997280).

研究领域（Research Area）

Protein_Acetylation

图片（Image Data）



Western blot detection of KAT7/Hbo1/MYST2 in Hela,A549,MCF-7,293T cell lysates using KAT7/Hbo1/MYST2 antibody(1:1000 diluted).

注意事项（Note）

For research use only .