

SAP18 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP14996c

Product Information

Application	WB, E
Primary Accession	O00422
Other Accession	O55128 , Q3T022 , NP_005861.2
Reactivity	Human
Predicted	Bovine, Mouse, Rat, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB35247
Calculated MW	17561
Antigen Region	58-86

Additional Information

Gene ID	10284
Other Names	Histone deacetylase complex subunit SAP18, 18 kDa Sin3-associated polypeptide, 2HOR0202, Cell growth-inhibiting gene 38 protein, Sin3-associated polypeptide p18, SAP18
Target/Specificity	This SAP18 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 58-86 amino acids from the Central region of human SAP18.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SAP18 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SAP18
Function	Component of the SIN3-repressing complex. Enhances the ability of

SIN3-HDAC1-mediated transcriptional repression. When tethered to the promoter, it can direct the formation of a repressive complex to core histone proteins. Auxiliary component of the splicing- dependent multiprotein exon junction complex (EJC) deposited at splice junction on mRNAs. The EJC is a dynamic structure consisting of core proteins and several peripheral nuclear and cytoplasmic associated factors that join the complex only transiently either during EJC assembly or during subsequent mRNA metabolism. Component of the ASAP and PSAP complexes which bind RNA in a sequence-independent manner and are proposed to be recruited to the EJC prior to or during the splicing process and to regulate specific excision of introns in specific transcription subsets. The ASAP complex can inhibit mRNA processing during in vitro splicing reactions. The ASAP complex promotes apoptosis and is disassembled after induction of apoptosis. Involved in the splicing modulation of BCL2L1/Bcl-X (and probably other apoptotic genes); specifically inhibits the formation of proapoptotic isoforms such as Bcl-X(S); the activity is different from the established EJC assembly and function.

Cellular Location

Nucleus. Cytoplasm. Nucleus speckle. Note=Shuttles between the nucleus and the cytoplasm (PubMed:16314458). Colocalizes with ACIN1 and SRSF2 in nuclear speckles (PubMed:20966198).

Tissue Location

Ubiquitous.

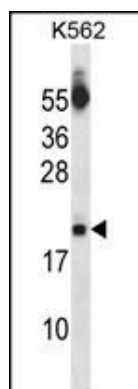
Background

Histone acetylation plays a key role in the regulation of eukaryotic gene expression. Histone acetylation and deacetylation are catalyzed by multisubunit complexes. The protein encoded by this gene is a component of the histone deacetylase complex, which includes SIN3, SAP30, HDAC1, HDAC2, RbAp46, RbAp48, and other polypeptides. This protein directly interacts with SIN3 and enhances SIN3-mediated transcriptional repression when tethered to the promoter. A pseudogene has been identified on chromosome 2.

References

Sorin, M., et al. PLoS Pathog. 5 (6), E1000463 (2009) :
McCallum, S.A., et al. Biochemistry 45(39):11974-11982(2006)
Joselin, A.P., et al. J. Biol. Chem. 281(18):12475-12484(2006)
Schwerk, C., et al. Mol. Cell. Biol. 23(8):2981-2990(2003)
Koipally, J., et al. EMBO J. 18(11):3090-3100(1999)

Images



SAP18 Antibody (Center) (Cat. #AP14996c) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the SAP18 antibody detected the SAP18 protein (arrow).