

Mouse Epc1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21161a

Product Information

Application	WB, E
Primary Accession	<u>Q8C9X6</u>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB51001
Calculated MW	90411

Additional Information

Gene ID	13831
Other Names	Enhancer of polycomb homolog 1, Epc1
Target/Specificity	This Mouse Epc1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 425-460 amino acids from the Central region of Mouse Epc1.
Dilution	WB~~1:2000 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	Mouse Epc1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Epc1 {ECO:0000303 PubMed:9735366, ECO:0000312 MGI:MGI:1278322}
Function	Component of the NuA4 histone acetyltransferase (HAT) complex, a multiprotein complex involved in transcriptional activation of select genes principally by acetylation of nucleosomal histones H4 and H2A (PubMed: <u>28694333</u>). The NuA4 complex plays a direct role in repair of DNA double-strand breaks (DSBs) by promoting homologous recombination (HR) (By similarity). The NuA4 complex is also required for spermatid development

	by promoting acetylation of histones: histone acetylation is required for histone replacement during the transition from round to elongating spermatids (PubMed: <u>28694333</u>). In the NuA4 complex, EPC1 is required to recruit MBTD1 into the complex (By similarity).
Cellular Location	Nucleus. Cytoplasm
Tissue Location	Expressed in adult brain, heart, kidney, liver, lung, skeletal muscle and testis (PubMed:9735366). Expressed in male germ cells, present in round spermatids of steps 1 to 4 (PubMed:28694333).

Background

Component of the NuA4 histone acetyltransferase (HAT) complex which is involved in transcriptional activation of select genes principally by acetylation of nucleosomal histones H4 and H2A. This modification may both alter nucleosome - DNA interactions and promote interaction of the modified histones with other proteins which positively regulate transcription. This complex may be required for the activation of transcriptional programs associated with oncogene and proto-oncogene mediated growth induction, tumor suppressor mediated growth arrest and replicative senescence, apoptosis, and DNA repair. NuA4 may also play a direct role in DNA repair when directly recruited to sites of DNA damage (By similarity).

References

Stankunas K.,et al.Development 125:4055-4066(1998). Carninci P.,et al.Science 309:1559-1563(2005).

Images



Anti-Mouse Epc1 Antibody (Center) at 1:2000 dilution + mouse brain lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size :90 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.