

## Mouse Epc1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21161a

### **Specification**

## Mouse Epc1 Antibody (Center) - Product Information

Application WB,E
Primary Accession Q8C9X6
Reactivity Mouse
Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 90411

# Mouse Epc1 Antibody (Center) - 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

#### **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.

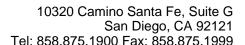
### **Precautions**

Mouse Epc1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### Mouse Epc1 Antibody (Center) - 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: 28694333). 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: 28694333). In the NuA4 complex, EPC1 is required to recruit MBTD1 into the complex (By similarity).

**Cellular Location** Nucleus. Cytoplasm

# **Tissue Location**

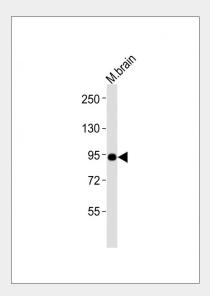
Expressed in adult brain, heart, kidney, liver, lung, skeletal muscle and testis (PubMed:9735366). Expressed in male germ cells, present in round spermatids of steps 1 to 4 (PubMed:28694333).

# Mouse Epc1 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Mouse Epc1 Antibody (Center) - 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.

# Mouse Epc1 Antibody (Center) - 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).

# Mouse Epc1 Antibody (Center) - References

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