

#### **EPC1 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20494c

#### Specification

# **EPC1** Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region WB,E <u>Q9H2F5</u> <u>Q8C9X6</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 305-334

# **EPC1** Antibody (Center) - Additional Information

Gene ID 80314

**Other Names** Enhancer of polycomb homolog 1, EPC1

Target/Specificity

This EPC1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 305-334 amino acids from the Central region of human EPC1.

Dilution WB~~1:1000

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

EPC1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# EPC1 Antibody (Center) - Protein Information

Name EPC1 {ECO:0000303|PubMed:10976108, ECO:0000312|HGNC:HGNC:19876}

**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>14966270</u>). The NuA4 complex plays a direct role in



repair of DNA double-strand breaks (DSBs) by promoting homologous recombination (HR) (PubMed:<u>27153538</u>). 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 (By similarity). In the NuA4 complex, EPC1 is required to recruit MBTD1 into the complex (PubMed:<u>32209463</u>).

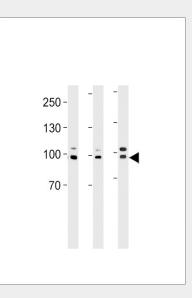
Cellular Location Nucleus. Cytoplasm {ECO:0000250|UniProtKB:Q8C9X6}

# **EPC1** Antibody (Center) - Protocols

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

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

### **EPC1** Antibody (Center) - Images



EPC1 Antibody (Center) (Cat. #AP20494c) western blot analysis in A2058,Hela cell line and mouse heart tissue lysates (35ug/lane).This demonstrates the EPC1 antibody detected the EPC1 protein (arrow).

# 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.

### **EPC1** Antibody (Center) - References

Shimono Y., et al. J. Biol. Chem. 275:39411-39419(2000). Nunes D.N., et al. Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases. Ota T., et al. Nat. Genet. 36:40-45(2004). Deloukas P., et al. Nature 429:375-381(2004). Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.