

**EPC1 Blocking Peptide (Center)**  
**Synthetic peptide**  
**Catalog # BP20494c****Specification**

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**EPC1 Blocking Peptide (Center) - Product Information**

Primary Accession [O9H2F5](#)  
Other Accession [Q8C9X6](#)

**EPC1 Blocking Peptide (Center) - Additional Information**

**Gene ID** 80314

**Other Names**

Enhancer of polycomb homolog 1, EPC1

**Target/Specificity**

The synthetic peptide sequence is selected from aa 320-334 of Human EPC1

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**EPC1 Blocking Peptide (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:<a href="http://www.uniprot.org/citations/14966270" target="\_blank">14966270</a>). The NuA4 complex plays a direct role in repair of DNA double-strand breaks (DSBs) by promoting homologous recombination (HR) (PubMed:<a href="http://www.uniprot.org/citations/27153538" target="\_blank">27153538</a>). 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:<a href="http://www.uniprot.org/citations/32209463" target="\_blank">32209463</a>).

**Cellular Location**

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

## **EPC1 Blocking Peptide (Center) - Protocols**

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

- [Blocking Peptides](#)

## **EPC1 Blocking Peptide (Center) - Images**

## **EPC1 Blocking Peptide (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 Blocking Peptide (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.