

CBX5 Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP13779c**Specification**

CBX5 Antibody (Center) Blocking peptide - Product InformationPrimary Accession [P45973](#)**CBX5 Antibody (Center) Blocking peptide - Additional Information****Gene ID** 23468**Other Names**

Chromobox protein homolog 5, Antigen p25, Heterochromatin protein 1 homolog alpha, HP1 alpha, CBX5, HP1A

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13779c was selected from the Center region of CBX5. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

CBX5 Antibody (Center) Blocking peptide - Protein Information**Name** CBX5**Synonyms** HP1A**Function**

Component of heterochromatin that recognizes and binds histone H3 tails methylated at 'Lys-9' (H3K9me), leading to epigenetic repression. In contrast, it is excluded from chromatin when 'Tyr-41' of histone H3 is phosphorylated (H3Y41ph). Can interact with lamin-B receptor (LBR). This interaction can contribute to the association of the heterochromatin with the inner nuclear membrane. Involved in the formation of functional kinetochore through interaction with MIS12 complex proteins.

Cellular Location

Nucleus. Chromosome. Chromosome, centromere Note=Colocalizes with HNRNPU in the nucleus (PubMed:19617346) Component of centromeric and pericentromeric heterochromatin Associates

with chromosomes during mitosis. Associates specifically with chromatin during metaphase and anaphase (PubMed:19617346) Localizes to sites of DNA damage (PubMed:28977666)

CBX5 Antibody (Center) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

CBX5 Antibody (Center) Blocking peptide - Images

CBX5 Antibody (Center) Blocking peptide - Background

This gene encodes a highly conserved nonhistone protein, which is a member of the heterochromatin protein family. The protein is enriched in the heterochromatin and associated with centromeres. The protein has a single N-terminal chromodomain which can bind to histone proteins via methylated lysine residues, and a C-terminal chromo shadow-domain (CSD) which is responsible for the homodimerization and interaction with a number of chromatin-associated nonhistone proteins. The encoded product is involved in the formation of functional kinetochore through interaction with essential kinetochore proteins. The gene has a pseudogene located on chromosome 3. Multiple alternatively spliced variants, encoding the same protein, have been identified.

CBX5 Antibody (Center) Blocking peptide - References

Nozawa, R.S., et al. Nat. Cell Biol. 12(7):719-727(2010) Zeng, W., et al. Epigenetics 5(4):287-292(2010) Emelyanov, A.V., et al. J. Biol. Chem. 285(20):15027-15037(2010) Kiyomitsu, T., et al. J. Cell Biol. 188(6):791-807(2010) Chaturvedi, P., et al. PLoS ONE 5 (5), E10620 (2010) :