10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

HP-1α mouse Monoclonal Antibody(5E3)

Catalog # AP63830

Specification

HP-1α mouse Monoclonal Antibody(5E3) - Product Information

Application	**WB, IHC-P, IF**
Primary Accession	P45973
Reactivity	**Human, Mouse, Rat**
Host	**Mouse**
Clonality	**Monoclonal**

HP-1α mouse Monoclonal Antibody(5E3) - Additional Information

Gene ID 23468

Other Names
Chromobox protein homolog 5 (Antigen p25) (Heterochromatin protein 1 homolog alpha) (HP1 alpha)

Dilution
WB~~IF: 1:50-200 WB 1:500-2000,IHC-p 1:50-300
IHC-P~~N/A
IF~~IF: 1:50-200 WB 1:500-2000,IHC-p 1:50-300

Format
Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions
-20℃

HP-1α mouse Monoclonal Antibody(5E3) - 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) (PubMed:19783980). May contribute to the association of heterochromatin with the inner nuclear membrane by interactions with the lamin-B receptor (LBR) (PubMed:19783980). Involved in the formation of kinetochore through interaction with the MIS12 complex subunit NSL1 (PubMed:19783980, PubMed:20231385). Required for the formation of the inner centromere (PubMed:<a

href="http://www.uniprot.org/citations/20231385" target="_blank">20231385).

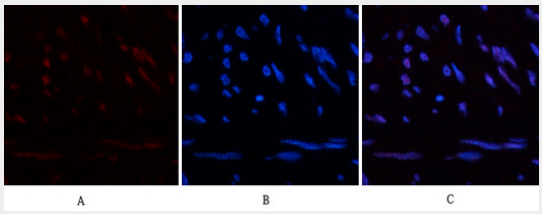
Cellular Location
Nucleus. Chromosome. Chromosome, centromere. Note=Colocalizes with HNRNPU in the nucleus (PubMed:19617346). Component of centromeric and pericentromeric heterochromatin. Associates with chromosomes during mitosis. Associates specifically with chromatin during metaphase and anaphase (PubMed:19617346). Localizes to sites of DNA damage (PubMed:28977666)

HP-1α mouse Monoclonal Antibody(5E3) - Protocols

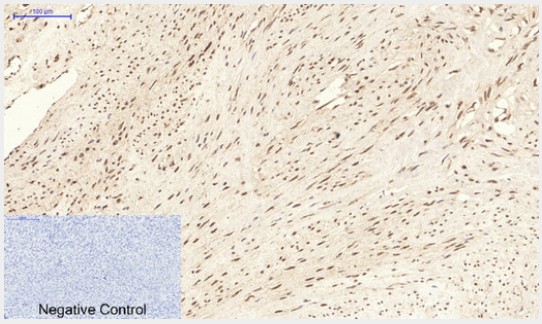
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HP-1α mouse Monoclonal Antibody(5E3) - Images



Immunofluorescence analysis of human-uterus tissue. 1,HP-1α Mouse Monoclonal Antibody(5E3)(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1,HP-1α Mouse Monoclonal Antibody(5E3) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.

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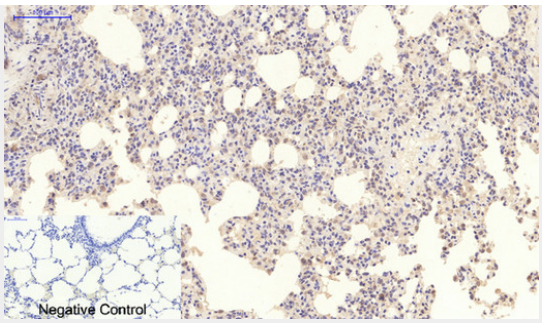
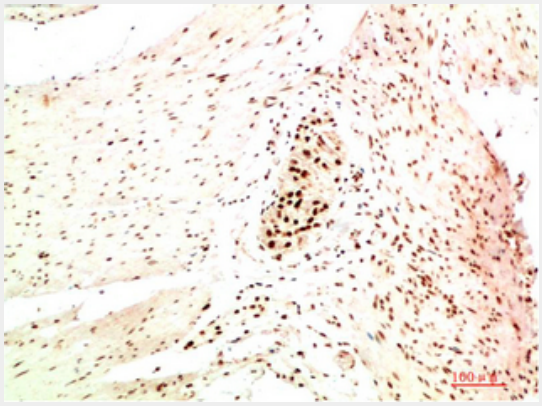
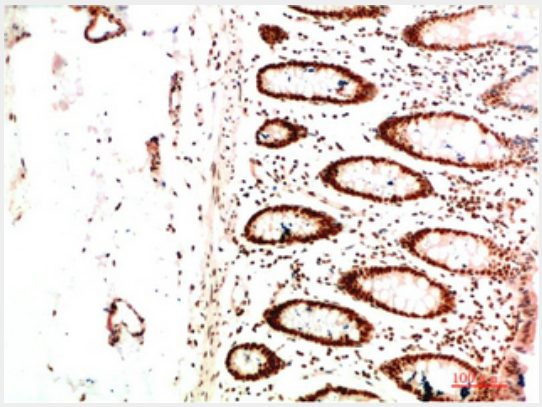


Immunohistochemical analysis of paraffin-embedded Rat-lung tissue. 1,HP-1α Mouse Monoclonal Antibody(5E3) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Human Colon Carcinoma Tissue using HP-1 α Mouse mAb diluted at 1:200



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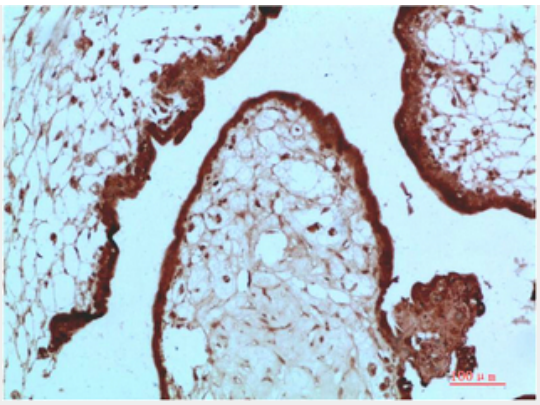
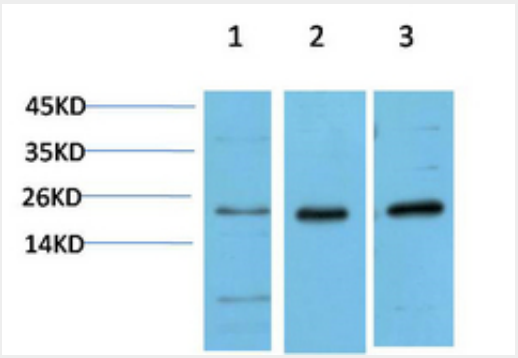


Immunohistochemical analysis of paraffin-embedded Human Placenta Tissue using HP-1 α Mouse mAb diluted at 1:200



Western blot analysis of 1) Hela Cell Lysate, 2)3T3 Cell Lysate, 3) PC12 Cell Lysate using HP-1γα Mouse mAb diluted at 1:1000.

HP-1α mouse Monoclonal Antibody(5E3) - Background

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.