Product Name: HP-1α(5E3)Mouse Monoclonal Antibody
Catalog #: AMM12186

Summary

Production Name	HP-1α(5E3)Mouse Monoclonal Antibody
Description	Mouse Monoclonal Antibody
Host	Mouse
Application	IF,WB,IHC
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	CBX5 HP1A
Alternative Names	Chromobox protein homolog 5 (Antigen p25) (Heterochromatin protein 1 homolog alpha) (HP1 alpha)
Gene ID	23468.0
SwissProt ID	P45973.Recombinant Protein of HP-1α

Application

Dilution Ratio	IF 1:50-200 WB 1:500-2000,IHC-p 1:50-300
Molecular Weight	22kD

Background

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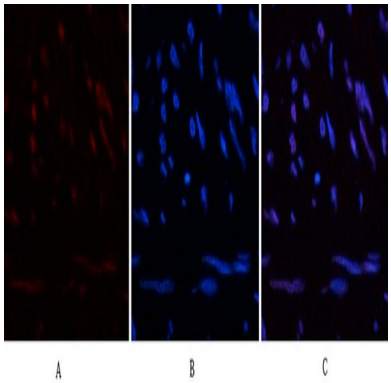
This gene encodes a highly conserved nonhistone protein, which is a member of the heterochromatin protein family. The protein is enriched in the heterochromatin and associated with centromeres. The protein has a single N-terminal chromodomain which can bind to histone proteins via methylated lysine residues, 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. [provided by RefSeq, Jul 2008],function:Component of heterochromatin. Recognizes and binds histone H3 tails methylated at 'Lys-9', leading to epigenetic repression. 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.,PTM:Phosphorylation of HP1 and LBR may be responsible for some of the alterations in chromatin organization and nuclear structure which occur at various times during the cell cycle (By similarity). Phosphorylated during interphase and possibly hyper-phosphorylated during mitosis.,similarity:Contains 2 chromo domains.,subcellular location:Component of centromeric and pericentromeric heterochromatin. Associates with chromosomes during mitosis. Associates specifically with chromatin during metaphase and anaphase.,subunit:Interacts with SUV420H1 and SUV420H2 (By similarity). Interacts directly with ATRX, CHAF1A, LBR, NIPBL, SP100, STAM2 and TRIM28 via the chromoshadow domain. Can interact directly with CBX3 via the chromoshadow domain. Interacts with histone H3 methylated at 'Lys-9'. Interacts with MIS12 and C20orf127. Interacts with HP1BP3.,

Research Area

Image Data



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

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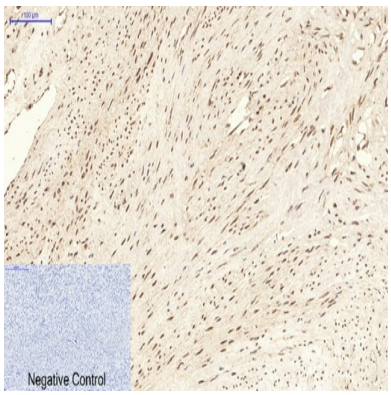
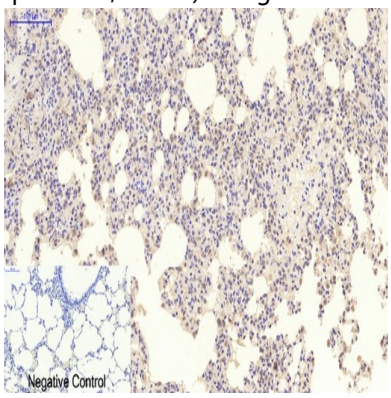
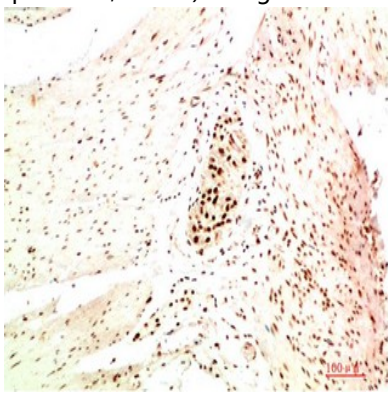


Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1,HP-1α Mouse Monoclonal Antibody（5E3）was diluted at 1:200（4°C,overnight）. 2, Sodium citrate pH 6.0 was used for antibody retrieval（>98°C,20min）. 3,Secondary antibody was diluted at 1:200（room tempeRature, 30min）. Negative control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



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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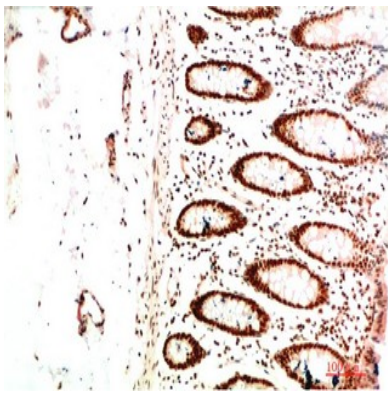
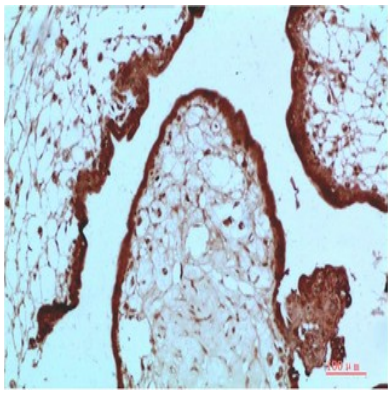
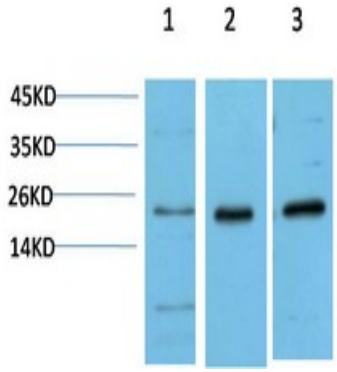


Immunohistochemical analysis of paraffin-embedded Human Colon Carcinoma Tissue using HP-1 α Mouse mAb diluted at 1:200



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.

Note

For research use only.