

Mouse HP1 alpha/CBX5 Monoclonal Antibody | anti-CBX5 antibody

Anti-HP1 alpha/CBX5 Antibody (monoclonal, 8G6)

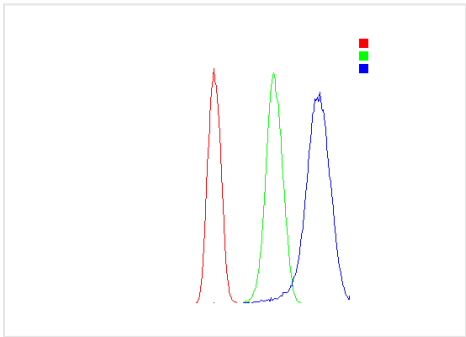
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19373	Mouse	Human, Mouse, Rat	Western Blot, Immunohistochemistry, Immunocytochemistry, Immunofluorescence, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

HP1 alpha/CBX5; Monoclonal Antibody; Anti-HP1 alpha/CBX5 Antibody (monoclonal; 8G6); Chromobox protein homolog 5; Antigen p25; Heterochromatin protein 1 homolog alpha; HP1 alpha; CBX5; HP1A; chromobox 5; anti-CBX5 antibody

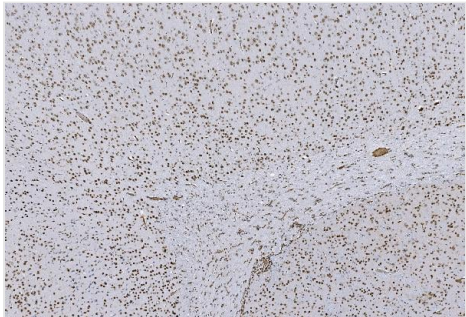
PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Isotype	Mouse IgG2b
Clone Number	8G6
Specificity	Mouse IgG monoclonal antibody for HP1 alpha/CBX5 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Applicable Applications for anti-CBX5 antibody	WB (Western Blot), IHC (Immunohistochemistry), ICC (Immunocytochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry)
Application Notes	WB: 0.25-0.5ug/ml Human, Mouse, Rat IHC-P: 2-5ug/ml Human, Mouse, Rat ICC/IF: 5ug/ml Human FC/FACS/FCM: 1-3ug/1x106 cells Human
Immunogen	E Coli-derived human HP1 alpha/CBX5 recombinant protein (Position: M1-S191).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



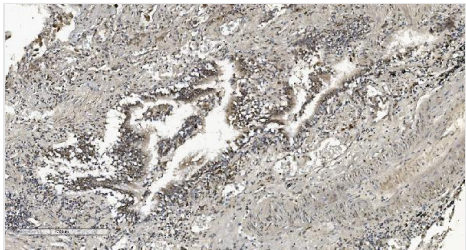
FCM (Flow Cytometry)

Figure 12. Flow Cytometry analysis of U251 cells using anti-HP1 alpha/CBX5 antibody (AAA19373). Overlay histogram showing U251 cells stained with AAA19373 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti- HP1 alpha/CBX5 Antibody (AAA19373, 1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was mouse IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



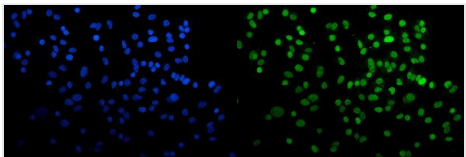
IHC (Immunohistochemistry)

Figure 10. IHC analysis of HP1 alpha/CBX5 using anti-HP1 alpha/CBX5 antibody (AAA19373).HP1 alpha/CBX5 was detected in paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml mouse anti-HP1 alpha/CBX5 Antibody (AAA19373) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



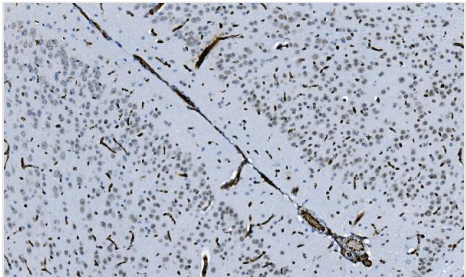
IHC (Immunohistochemistry)

Figure 8. IHC analysis of HP1 alpha/CBX5 using anti-HP1 alpha/CBX5 antibody (AAA19373).HP1 alpha/CBX5 was detected in paraffin-embedded section of human renal clear cell carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml mouse anti-HP1 alpha/CBX5 Antibody (AAA19373) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



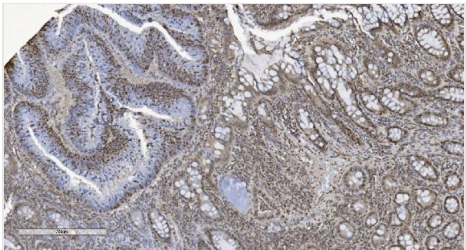
IF (Immunofluorescence)

Figure 11. IF analysis of HP1 alpha/CBX5 using anti- HP1 alpha/CBX5 antibody (AAA19373).HP1 alpha/CBX5 was detected in immunocytochemical section of A549 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5μg/mL mouse anti- HP1 alpha/CBX5 Antibody (AAA19373) overnight at 4 degree C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IHC (Immunohistochemistry)

Figure 9. IHC analysis of HP1 alpha/CBX5 using anti-HP1 alpha/CBX5 antibody (AAA19373).HP1 alpha/CBX5 was detected in paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml mouse anti-HP1 alpha/CBX5 Antibody (AAA19373) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



IHC (Immunohistochemistry)

Figure 7. IHC analysis of HP1 alpha/CBX5 using anti-HP1 alpha/CBX5 antibody (AAA19373).HP1 alpha/CBX5 was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml mouse anti-HP1 alpha/CBX5 Antibody (AAA19373) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).

ADDITIONAL INFORMATION

Related Product Information for anti-CBX5 antibody	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.
References	1. Allan, R. S., Zueva, E., Cammas, F., Schreiber, H. A., Masson, V., Belz, G. T., Roche, D., Maison, C., Quivy, J. - P., Almouzni, G., Amigorena, S. An epigenetic silencing pathway controlling T helper 2 cell lineage commitment. Nature 487: 249-253, 2012. 2. Bannister, A. J., Zegerman, P., Partridge, J. F., Miska, E. A., Thomas, J. O., Allshire, R. C., Kouzarides, T. Selective recognition of methylated lysine 9 on histone H3 by the HP1 chromo domain. Nature 410: 120-124, 2001. 3. Cheutin, T., McNairn, A. J., Jenuwein, T., Gilbert, D. M., Singh, P. B., Misteli, T. Maintenance of stable heterochromatin domains by dynamic HP1 binding. Science 299: 721-725, 2003.

NCBI AND UNIPROT INFORMATION

NCBI GI #	188035908
NCBI GeneID	23468
NCBI Accession #	NP_001120793.1
NCBI GenBank Nucleotide #	NM_001127321.1
UniProt Accession #	P45973; B2R8T9
Molecular Weight	22,225 Da
NCBI Official Full Name	chromobox protein homolog 5
NCBI Official Synonym Full Names	chromobox homolog 5
NCBI Official Symbol	CBX5
NCBI Official Synonym Symbols	HP1; HP1A
NCBI Protein Information	chromobox protein homolog 5; HP1-ALPHA; HP1Hs alpha; antigen p25; HP1 alpha homolog; heterochromatin protein 1-alpha; heterochromatin protein 1 homolog alpha; chromobox homolog 5 (HP1 alpha homolog, Drosophila)
UniProt Protein Name	Chromobox protein homolog 5
UniProt Gene Name	CBX5
UniProt Synonym Gene Names	HP1A; HP1 alpha
UniProt Entry Name	CBX5_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/hp1-alpha-cbx5-antibody-clone-8g6-western-blot-immunohistochemistry-immunocytochemistry-immunofluorescence-flow-cytometry-elisa/19373>