

Rabbit HP1 gamma Polyclonal Antibody | anti-CBX3 antibody

Anti-HP1 gamma Picoband antibody

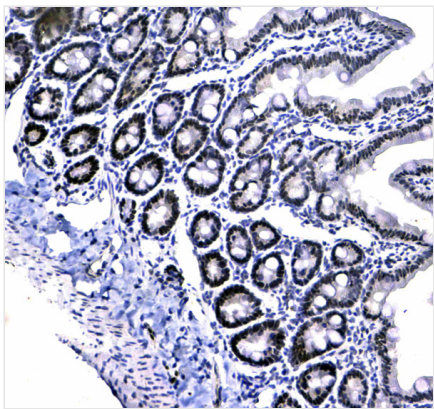
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19145	Rabbit	Human, Mouse, Rat No cross reactivity with other proteins.	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

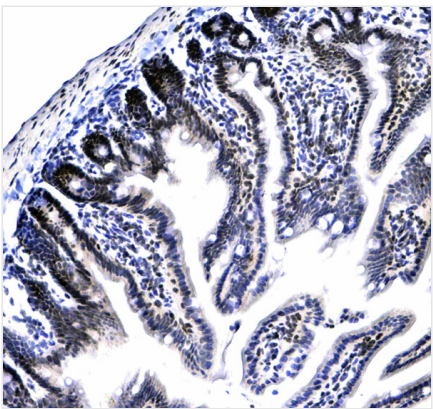
HP1 gamma; Polyclonal Antibody; Anti-HP1 gamma Picoband antibody; Chromobox protein homolog 3; HECH; Heterochromatin protein 1 homolog gamma; Modifier 2 protein; CBX3; anti-CBX3 antibody

PRODUCT SPECIFICATIONS

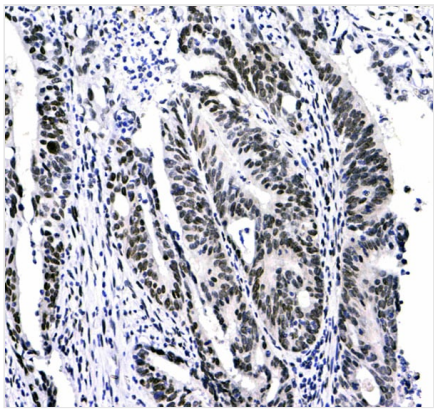
Host	Rabbit
Reactivity	Human, Mouse, Rat No cross reactivity with other proteins.
Clonality	Polyclonal
Form/Format	Lyophilized
Sequence Length	183
Applicable Applications for anti-CBX3 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Application Notes	WB: 0.1-0.5µg/ml Immunohistochemistry (Paraffin-embedded Section): 0.5-1µg/ml Direct ELISA: 0.1-0.5µg/ml
Immunogen	E Coli-derived human HP1 gamma recombinant protein (Position: A2-Q183).
Subcellular Localization	Nucleus. Associates with euchromatin and is largely excluded from constitutive heterochromatin. May be associated with microtubules and mitotic poles during mitosis (Potential).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500µg/ml.
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Na ₃ N.
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.



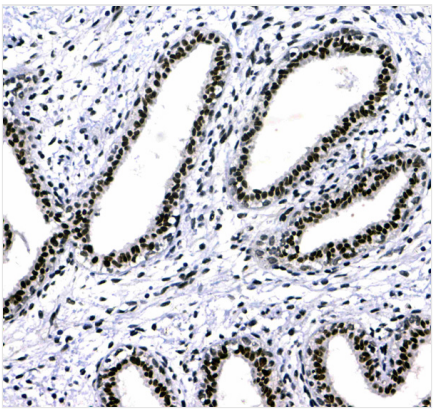
IHC (Immunohistochemistry)
Figure 6. IHC analysis of HP1 gamma using anti-HP1 gamma antibody (AAA19145).HP1 gamma was detected in paraffin-embedded section of rat small intestine tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-HP1 gamma Antibody (AAA19145) overnight at 4 degree C. Biotinylated goat anti-rabbit 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) with DAB as the chromogen.



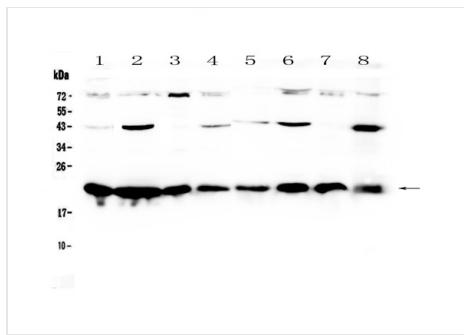
IHC (Immunohistochemistry)
Figure 5. IHC analysis of HP1 gamma using anti-HP1 gamma antibody (AAA19145).HP1 gamma was detected in paraffin-embedded section of mouse small intestine tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-HP1 gamma Antibody (AAA19145) overnight at 4 degree C. Biotinylated goat anti-rabbit 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) with DAB as the chromogen.



IHC (Immunohistochemistry)
Figure 4. IHC analysis of HP1 gamma using anti-HP1 gamma antibody (AAA19145).HP1 gamma was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-HP1 gamma Antibody (AAA19145) overnight at 4 degree C. Biotinylated goat anti-rabbit 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) with DAB as the chromogen.



IHC (Immunohistochemistry)
Figure 3. IHC analysis of HP1 gamma using anti-HP1 gamma antibody (AAA19145).HP1 gamma was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-HP1 gamma Antibody (AAA19145) overnight at 4 degree C. Biotinylated goat anti-rabbit 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) with DAB as the chromogen.



WB (Western Blot)

Figure 2. Western blot analysis of HP1 gamma using anti-HP1 gamma antibody (AAA19145). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human Hela cell lysate, Lane 2: human MCF-7 cell lysate, Lane 3: human COLO-320 cell lysate, Lane 4: human HepG2 cell lysate, Lane 5: human placenta tissue lysate, Lane 6: human A549 cell lysate, Lane 7: human SK-OV-3 cell lysate, Lane 8: human PANC-1 cell lysate. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-HP1 gamma antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for HP1 gamma at approximately 21KD. The expected band size for HP1 gamma is at 21KD.



WB (Western Blot)

Figure 1. Western blot analysis of HP1 gamma using anti-HP1 gamma antibody (AAA19145). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat brain tissue lysate, Lane 2: rat spleen tissue lysate, Lane 3: rat testis tissue lysate, Lane 4: rat PC-12 cell lysate, Lane 5: mouse brain tissue lysate, Lane 6: mouse spleen tissue lysate, Lane 7: mouse testis tissue lysate, Lane 8: mouse HEPA1-6 cell lysate, Lane 9: mouse NIH3T3 cell lysate. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-HP1 gamma antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for HP1 gamma at approximately 21KD. The expected band size for HP1 gamma is at 21KD.

ADDITIONAL INFORMATION

Related Product Information for anti-CBX3 antibody

Description: Chromobox protein homolog 3 is a protein that is encoded by the CBX3 gene in humans. At the nuclear envelope, the nuclear lamina and heterochromatin are adjacent to the inner nuclear membrane. The protein encoded by this gene binds DNA and is a component of heterochromatin. This protein also can bind lamin B receptor, an integral membrane protein found in the inner nuclear membrane. The dual binding functions of the encoded protein may explain the association of heterochromatin with the inner nuclear membrane. This protein binds histone H3 tails methylated at Lys-9 sites. This protein is also recruited to sites of ultraviolet-induced DNA damage and double-strand breaks. Two transcript variants encoding the same protein but differing in the 5' UTR, have been found for this gene.

Protein Function: Seems to be involved in transcriptional silencing in heterochromatin-like complexes. Recognizes and binds histone H3 tails methylated at 'Lys-9', leading to epigenetic repression. May contribute to the association of the heterochromatin with the inner nuclear membrane through its interaction with lamin B receptor (LBR). Involved in the formation of functional kinetochore through interaction with MIS12 complex proteins. Contributes to the conversion of local chromatin to a heterochromatin-like repressive state through H3 'Lys-9' trimethylation, mediates the recruitment of the methyltransferases SUV39H1 and/or SUV39H2 by the PER complex to the E-box elements of the circadian target genes such as PER2 itself or PER1.

NCBI AND UNIPROT INFORMATION

NCBI GI #	15082258
NCBI GeneID	11335
NCBI Accession #	NP_009207.2
NCBI GenBank Nucleotide #	NM_007276.4
UniProt Accession #	Q13185; Q96CD7; Q99409; Q9BVS3; Q9P0Z6
Molecular Weight	20,811 Da
NCBI Official Full Name	chromobox protein homolog 3
NCBI Official Synonym Full Names	chromobox 3
NCBI Official Symbol	CBX3

NCBI Official Synonym Symbols	HECH; HP1-GAMMA; HP1Hs-gamma
NCBI Protein Information	chromobox protein homolog 3
UniProt Protein Name	Chromobox protein homolog 3
UniProt Gene Name	CBX3
UniProt Synonym Gene Names	HP1 gamma

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/hp1-gamma-antibody-immunohistochemistry-western-blot-elisa/19145>