

ARG59773
anti-CBX3 / HP1 gamma antibodyPackage: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes CBX3 / HP1 gamma
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	CBX3 / HP1 gamma
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 1-183 of Human CBX3 (NP_009207.2).
Conjugation	Un-conjugated
Alternate Names	HP1-GAMMA; Chromobox protein homolog 3; HP1Hs-gamma; HP1 gamma; HECH; Heterochromatin protein 1 homolog gamma; Modifier 2 protein

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	IP	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Mouse lung and 293T	
Observed Size	23 kDa	

Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw

cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

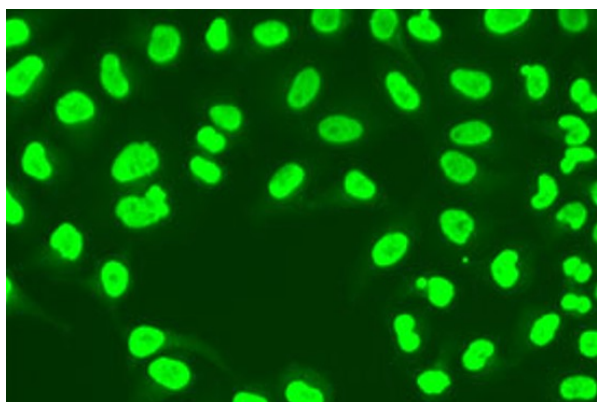
Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

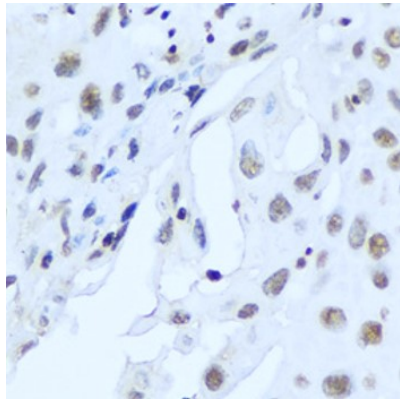
Gene Symbol	CBX3
Gene Full Name	chromobox homolog 3
Background	At the nuclear envelope, the nuclear lamina and heterochromatin are adjacent to the inner nuclear membrane. The protein encoded by this gene binds DNA and is a component of heterochromatin. This protein also can bind lamin B receptor, an 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.[provided by RefSeq, Mar 2011]
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. [UniProt]
Highlight	Related products: CBX3 antibodies ; CBX3 Duos / Panels ; Anti-Rabbit IgG secondary antibodies ; Related news: Senescence Marker Antibody Panel is launched
Calculated Mw	21 kDa
PTM	Phosphorylated by PIM1. Phosphorylated during interphase and possibly hyper-phosphorylated during mitosis. [UniProt]
Cellular Localization	Nucleus. Note=Associates with euchromatin and is largely excluded from constitutive heterochromatin. May be associated with microtubules and mitotic poles during mitosis (Potential). [UniProt]

Images



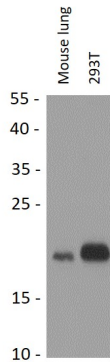
ARG59773 anti-CBX3 / HP1 gamma antibody ICC/IF image

Immunofluorescence: U2OS cells stained with ARG59773 anti-CBX3 / HP1 gamma antibody at 1:100 dilution.



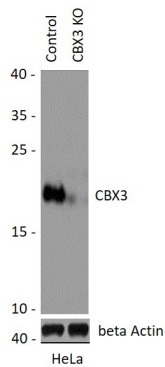
ARG59773 anti-CBX3 / HP1 gamma antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human lung cancer stained with ARG59773 anti-CBX3 / HP1 gamma antibody at 1:200 dilution.



ARG59773 anti-CBX3 / HP1 gamma antibody WB image

Western blot: 25 µg of Mouse lung and 293T cell lysates stained with ARG59773 anti-CBX3 / HP1 gamma antibody at 1:1000 dilution through one-step method.



ARG59773 anti-CBX3 / HP1 gamma antibody WB image

Western blot: Extracts from normal (control) and CBX3 knockout (KO) HeLa cells, using ARG59773 anti-CBX3 / HP1 gamma antibody at 1:500 dilution.