ARG53998
anti-HP1 alpha antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody recognizes CBX5
Tested Reactivity	Hu, Ms
Tested Application	ICC/IF, IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Target Name	HP1 alpha
Species	Human
Immunogen	Purified recombinant human HP1 alpha protein fragments expressed in E.coli.
Conjugation	Un-conjugated
Alternate Names	Heterochromatin protein 1 homolog alpha; Chromobox protein homolog 5; HP1; HP1 alpha; Antigen p25; HEL25; HP1A

Application Instructions

Application table

Application	Dilution
ICC/IF	1:300
IHC-P	1:400
WB	1:1000

Application Note: IHC-P: Antigen Retrieval: High pressure mediate and boil tissue section in Citrate buffer (pH 6.0).
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Observed Size: 26 kDa

Properties

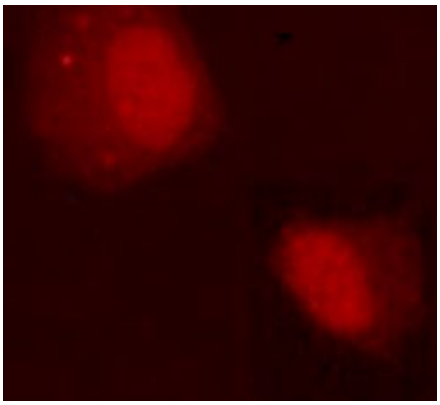
Form	Liquid
Purification	Affinity purified
Buffer	0.1M Tris-Glycine (pH 7.4), 150 mM NaCl, 0.2% Sodium azide and 50% Glycerol
Preservative	0.2% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term 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

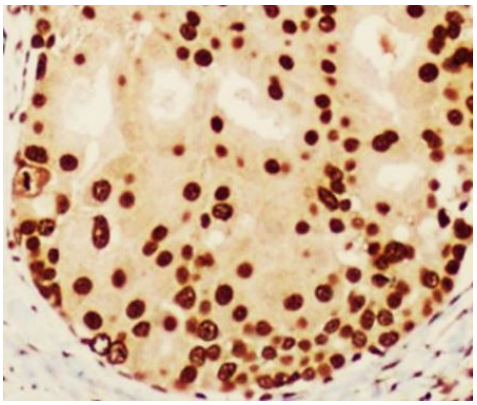
Database links	GeneID: 12419 Mouse GeneID: 23468 Human Swiss-port # P45973 Human Swiss-port # Q61686 Mouse
Gene Symbol	CBX5
Gene Full Name	chromobox homolog 5
Background	Component of heterochromatin that recognizes and binds histone H3 tails methylated at 'Lys-9' (H3K9me), leading to epigenetic repression. 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
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). 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. [UniProt]
Research Area	Controls and Markers antibody; Gene Regulation antibody
Calculated Mw	22 kDa
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. Ubiquitinated.
Cellular Localization	Nucleus. Chromosome

Images



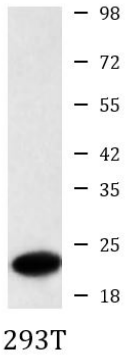
ARG53998 anti-HP1 alpha antibody ICC/IF image

Immunofluorescence: HeLa cells stained with ARG53998 anti-HP1 alpha antibody at 1:300 dilution.



ARG53998 anti-HP1 alpha antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast carcinoma stained with ARG53998 anti-HP1 alpha antibody at 1:400 dilution. Antigen Retrieval: High pressure mediate and boil tissue section in Citrate buffer (pH 6.0).



ARG53998 anti-HP1 alpha antibody WB image

Western blot: 293T cell lysate stained with ARG53998 anti-HP1 alpha antibody at 1:1000 dilution.