

# Immunotag™ HP1α Polyclonal Antibody

| Antibody Specification |  |
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| Catalog No.            | ITT2223  |
| Product Description    | Immunotag™ HP1α Polyclonal Antibody  |
| Size                   | 50 µg, 100 µg  |
| Conjugation            | HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647                                      |
| IMPORTANT NOTE         | This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return. |
| Target Protein         | HP1α   |
| Clonality              | Polyclonal   |
| Storage/Stability      | -20°C/1 year   |
| Application            | WB,IHC-p,IF,ELISA  |
| Recommended Dilution   | Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.       |
| Concentration          | 1 mg/ml  |
| Reactive Species       | Human,Mouse  |
| Host Species           | Rabbit   |
| Immunogen              | The antiserum was produced against synthesized peptide derived from human CBX5. AA range:41-90   |
| Specificity            | HP1α Polyclonal Antibody detects endogenous levels of HP1α protein.  |
| Purification           | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen   |
| Form                   | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.  |
| Gene Name              | CBX5   |
| Accession No.          | P45973 Q61686  |
| Alternate Names        | CBX5; HP1A; Chromobox protein homolog 5; Antigen p25; Heterochromatin protein 1 homolog alpha; HP1 alpha   |

## Antibody Specification

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| Description              | chromobox 5(CBX5) Homo sapiens 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],   |
| Protein Expression       | Epithelium,Fetal brain cortex,Placenta,  |
| Subcellular Localization | histone deacetylase complex,kinetochore,nuclear chromosome, telomeric region,nucleus,nuclear envelope,nucleoplasm,nuclear heterochromatin,pericentric heterochromatin,nucleolus,chromocenter,PML body,transcriptional repressor complex,   |
| Protein Function         | 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., |
| Usage                    | For Research Use Only! Not for diagnostic or therapeutic procedures.   |