

Product datasheet for TA347090

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OriGene Technologies, Inc.

HP1 alpha (CBX5) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: IF, WB

Recommended Dilution: Western blotting (1:1,000); IF: (1:500)

Reactivity: Human
Host: Rabbit
Isotype: IgG

Clonality: Polyclonal

Immunogen: The immunogen for anti-HP1. antibody: human HP1. (Heterochromatin protein 1 homolog

alpha), using the full length recombinant GST tagged protein.

Concentration: lot specific

Purification: Protein G purified polyclonal antibody in PBS containing 0.05% azide and 0.05% ProClin 300.

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Gene Name: chromobox 5

Database Link: NP 036249

Entrez Gene 23468 Human

P45973

Background: HP1 alpha (UniProt/Swiss-Prot entry P45973) is a component of heterochromatin. It

recognizes and binds to histone H3 tails methylated at 'Lys-9', leading to epigenetic

repression of transcription. HP1 alpha may also interact with lamin B receptor (LBR), thereby contributing to the association of the heterochromatin with the inner nuclear membrane. Further, HP1 alpha is involved in the formation of a functional kinetochore through

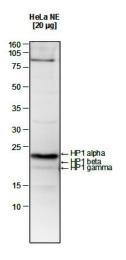
interaction with MIS12 complex proteins.

Synonyms: HEL25; HP1; HP1A

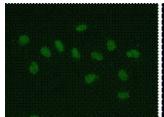


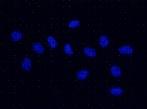


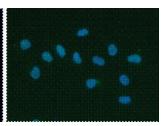
Product images:



WB was performed on nuclear extracts from HeLa cells (20 ug) with the antibody against human HP1a, diluted 1:1,000 in TBS-Tween containing 5% skimmed milk (Figure 1). The molecular weight marker (in kDa) is shown on the left; the expected location of HP1a, HP1 β and HP1? is indicated on the right. The WB analysis clearly demonstrates that the HP1a antibody specifically recognizes HP1a and not HP1 β and HP1?







HeLa cells were stained with the antibody against HP1aand with DAPI. Cells were fixed with 4% formaldehyde for 10' and blocked with PBS/TX-100 containing 5% normal goat serum and 1% BSA. The cells were immunofluorescently labelled with the HP1a antibody (left) diluted 1:500 in blocking solution followed by an anti-rabbit antibody conjugated to Alexa488. The middle panel shows staining of the nuclei with DAPI. A merge of the two stainings is shown on the right.