

**Rabbit Anti-CBX3/HP1 Polyclonal: RC0230, RC0230RTU7**

**Intended Use:** For Research Use Only

**Description:** Chromatin assembly factor-1 (CAF-1) is a multisubunit protein complex that comprises three polypeptide subunits known as p150, p60 and p48. CAF-1 is a nucleosome assembly factor that deposits newly synthesized and acetylated Histones H3/H4 into nascent chromatin during DNA replication. The p150 subunit of CAF-1 also supports the maintenance of heterochromatin, which requires the synthesis of both new histones and heterochromatin proteins and their orderly assembly during DNA replication. Heterochromatin is characterized as densely coiled chromatin that generally replicates late during S phase, has a low gene density, and contains large blocks of repetitive DNA that is relatively inaccessible to DNA-modifying reagents. In late S phase, p150 directly associates with heterochromatin associated proteins 1 (HP1), HP1 $\alpha$ , HP1 $\beta$  and HP1 $\gamma$ . As cells prepare for mitosis, CAF-1 p150 and some HP1 progressively dissociate from heterochromatin, coinciding with the phosphorylation of Histone H3. The HP1 proteins reassociate with chromatin at the end of mitosis, as Histone H3 is dephosphorylated.

**Specifications:**

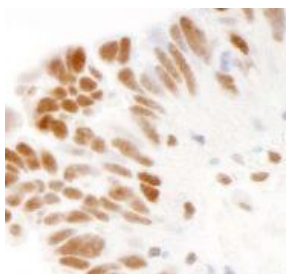
Clone: Polyclonal  
 Source: Rabbit  
 Isotype: IgG  
 Reactivity: Human  
 Localization: Nucleus  
 Formulation: Antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, IP  
 Package:

Description	Catalog No.	Size
CBX3/HP1 Concentrated	RC0230	1 ml
CBX3/HP1 Prediluted	RC0230RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Ovary carcinoma  
 Concentrated Dilution: 100-500  
 Pretreatment: Citrate pH6.0 or EDTA pH8.0 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human ovary carcinoma stained with anti-CBX3 using DAB

**References:**

1. CBX3/heterochromatin protein 1 gamma is significantly upregulated in patients with non-small cell lung cancer. Chang SC, et al. Asia Pac J Clin Oncol. Nov 10, 2017.
2. CBX3 promotes colon cancer cell proliferation by CDK6 kinase-independent function during cell cycle. Fan Y, et al. Oncotarget. Mar 21;8(12):19934-19946, 2017.

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Rev. A