Datasheet for ABIN129594

anti-CBX4 antibody (AA 90-115)

1 Image

Go to Product page

Overview

Quantity:	100 µg
Target:	CBX4
Binding Specificity:	AA 90-115
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), ELISA, Immunofluorescence (IF), Immunoprecipitation (IP), Fluorescence Microscopy (FM)

Product Details

Purpose:	PC2 Antibody
Immunogen:	Immunogen: This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near aa 90-115 of Human PC2 protein. Immunogen Type: Conjugated Peptide
Isotype:	IgG
Cross-Reactivity (Details):	Reactivity occurs against human PC2 protein.
Characteristics:	Synonyms: rabbit anti-PC2 antibody, E3 SUMO-protein ligase CBX4, Chromobox protein homolog 4, Polycomb 2 homolog, Pc2, hPc2, CBX4
Purification:	This is an affinity purified antibody produced by immunoaffinity chromatography using the immunizing peptide after immobilization to a solid phase.

Product Details

Sterility:	Sterile filtered

Target Details

Target:	CBX4
Alternative Name:	CBX4 (CBX4 Products)
Background:	Background: PC2 is the human homolog of the Drosophila 'Polycomb' (Pc) protein which has been identified as a gene family member associated with a cellular memory system that is responsible for the inheritance of gene activity by progeny cells. The human Pc homolog gene is more closely related to a Xenopus Pc homolog, XPc, than to a previously described human Pc homolog, CBX2 (hPc1). However, the hPc2 and CBX2/hPc1 proteins are shown to colocalize in interphase nuclei of human U-2 OS osteosarcoma cells, suggesting that the proteins are part of a common protein complex. The human protein is believed to function as a repressor of proto-oncogene activity and that interference with hPc2 function can lead to depression of proto-oncogene transcription and subsequently to cellular transformation. Other reports describe PC2 as a protein that has SUMO E3 activity for the corepressors CtBP and CtBP2.
Gene ID:	8535
UniProt:	O00257

Application Details

Application Notes:	Application Note: Anti-PC2 antibody has been tested for use in ELISA, WB, and IF. This affinity purified antibody is useful in immunofluorescence staining of cultured cells. In immunofluorescence, this antibody detects the expected discrete nuclear structure that is termed the PcG body, corresponding to the known localization of PC2. This affinity purified antibody is useful in western blotting using transfected cell lysates. Dilutions for western blotting represent a starting point dilution and further optimization may be required. The antibody detects a band of approximately 82 kDa (predicted molecular weight: 61.4 kDa). The antibody has been successfully used to detect FLAG-tagged transfected hPC2 (see figure). It detects a weak band that probably corresponds to endogenous PC2, however, a strong secondary band is also seen at 50kD in all cell lines thus far tested. This suggests that the antibody may also react with another highly expressed ubiquitous protein. Reactivity in other immunoassays is unknown. Western Blot Dilution: 1:1,000 - 1:4,000 Immunoprecipitation Dilution: 1:100

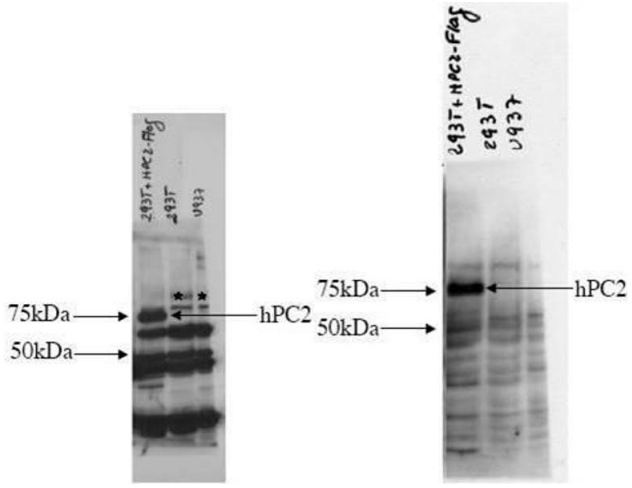
Application Details

	ELISA Dilution: 1:10,000 - 1:40,000 IF Microscopy Dilution: 1:100 - 1:400 Other: User Optimized
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1.36 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: None Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiry Date:	12 months

Images



Western Blotting

Image 1. Western blotting. Analysis shows the detection of human PC2 in probed lysates using antibodies-online's Affinity Purified anti-hPC2 antibody. The panel on the left shows the blot probed with anti-hPC2. The panel on the right is the same blot reprobed with anti-DYKDDDDK antibody to confirm the presence of DYKDDDDK tagged recombinant PC2 in the lysate. In the left panel the band labeled as hPC2 is DYKDDDDK-tagged transfected hPC2 in

293T cells. The bands labeled with stars are likely endogenous hPC2. In the right panel the band labeled hPC2 is DYKDDDDK-tagged transfected hPC2 in 293T cells. Data contributed by Dr Ari Melnick, Albert Einstein College of Medicine.