# abcam

**Product datasheet** 

# Anti-CBX4 antibody ab4189

<u>1 References</u> 2 图像

概述		
产品名称	Anti-CBX4 <b>抗体</b>	
描述	兔多克隆抗体to CBX4	
宿主	Rabbit	
特异性	In immunofluoresence, this antibody detects the expected discrete nuclear structure that is termed the PcG body, corresponding to the known localisation of PC2. The antibody has been successfully used to detect FLAG-tagged transfected hPC2 (see picture). 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 also reacts with another ubiquitous highly expressed protein.	
经 <b>测</b> 试应 <b>用</b>	适用于: ICC/IF, WB	
种属反应性	与反应: Human	
免疫原	Synthetic peptide:	
	GLQDSSTDNRAKLC	
	, corresponding to amino acids 95 - 107 of Human PC2. Image: Run BLAST with Image: Run BLAST with	
<b>常</b> 规说 <b>明</b>		
	PC2 and other members of the Drosophila Polycomb group gene family are part of a cellular memory system that is responsible for the inheritance of gene activity by progeny cells.	
	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.	
	If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As	
性能		
形式	Liquid	
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw	

cycles.

存储溶液	Preservative: 0.01% Sodium azide Constituents: 0.42% Potassium phosphate, 0.87% Sodium chloride
纯 <b>度</b>	Immunogen affinity purified
纯 <b>化</b> 说明	This is an affinity purified antibody produced by immunoaffinity chromatography using the immunizing peptide after immobilization to a solid phase.
Primary antibody说明	PC2 and other members of the Drosophila Polycomb group gene family are part of a cellular memory system that is responsible for the inheritance of gene activity by progeny cells.
克隆	多克隆
同种型	lgG

## 应用

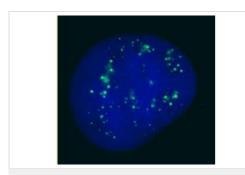
# The Abpromise guarantee Abpromise™承诺保证使用ab4189于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		Use at an assay dependent dilution.
WB		Use at an assay dependent dilution. Detects a band of approximately 82 kDa (predicted molecular weight: 61 kDa).

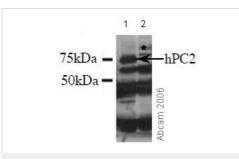
<b>靶</b> 标	
功能	E3 SUMO-protein ligase which facilitates SUMO1 conjugation by UBE2I. Component of the Polycomb group (PcG) multiprotein PRC1 complex, a complex required to maintain the transcriptionally repressive state of many genes, including Hox genes, throughout development. PcG PRC1 complex acts via chromatin remodeling and modification of histones; it mediates monoubiquitination of histone H2A 'Lys-119', rendering chromatin heritably changed in its expressibility.
组织 <b>特异性</b>	Ubiquitous.
通路	Protein modification; protein sumoylation.
序列相似性	Contains 1 chromo domain.
翻译后修饰	Phosphorylated on Thr-497 by HIPK2 upon DNA damage; which enhances E3 SUMO-protein ligase activity and promotes sumoylation on Lys-494.
细 <b>胞定位</b>	Nucleus.

图片



Immunocytochemistry/ Immunofluorescence - Anti-CBX4 antibody (ab4189)

This image is courtesy of Luke Hughes-Davies and Rhiannon Jade, Gurdon Institute, Cambridge, UK



Western blot - Anti-CBX4 antibody (ab4189)

This image is courtesy of Dr Ari Melnick, Albert Einstein College of Medicine

Immunofluorescent imaging of human cells (U2OS) with ab4189 reveals the expected discrete nuclear structure that is termed the PcG body corresponding to the known localisation of PC2. This corresponds to results seen in Satijn et al.

IF was performed with a standard paraformaldehyde technique (fixed in PBS buffered PFH 4% for 5 minutes, permeabilised with 0.5% triton-PBS for 5 minutes, blocked with 5% milk / 0.2% tween for one hour. Primary antibody used at 1/200 in 5% milk / 0.2% TWEEN for one hour, secondary antibody for 30 minutes. All blocking and incubation steps carried out at 37 degrees C. Nuclei counterstained with Hoechst stain (blue).

All lanes : Anti-CBX4 antibody (ab4189)

Lane 1 : HEK 293 lysate over-expressing DDDDK tagged hPC2 Lane 2 : HEK 293 lysate

Predicted band size: 61 kDa Observed band size: 75 kDa Additional bands at: 30 kDa (possible non-specific secondary antibody binding), 49 kDa (possible non-specific secondary antibody binding), 65 kDa (possible non-specific secondary antibody binding)

ab4189 specifically recognises over expressed DDDDK tagged hPC2 in HEK293 cells (lane1). The lower bands are assigned to degradation products.

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