# abcam

# Product datasheet

# Anti-CBX2 antibody ab80044

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Overview

Product name Anti-CBX2 antibody

**Description** Rabbit polyclonal to CBX2

Host species Rabbit

**Specificity** From Jan 2024, QC testing of replenishment batches of this polyclonal changed. All tested and

expected application and reactive species combinations are still covered by our Abcam product promise. However, we no longer test all applications. For more information on a specific batch,

please contact our Scientific Support who will be happy to help.

Tested applications Suitable for: IP, WB

Species reactivity Reacts with: Mouse, Human

Immunogen Synthetic peptide corresponding to Human CBX2 aa 500 to the C-terminus (C terminal)

conjugated to keyhole limpet haemocyanin.

(Peptide available as ab91615)

Positive control

This antibody gave a positive signal in the following lysates: JEG3 whole cell; HUVEC whole cell;

HEK293 whole cell; MEL-1 whole cell; MEL-2 whole cell; HeLa nuclear; NIH3T3 whole cell; human

testis tissue.

**General notes**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

**Properties** 

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

Purity Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab80044 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		Use at an assay dependent concentration.
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 52 kDa (predicted molecular weight: 56 kDa).

#### **Target**

Function

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. Involved in sexual development, acting as activator of NR5A1 expression.

**Involvement in disease**Defects in CBX2 are the cause of 46,XY sex reversal type 5 (SRXY5) [MIM:613080]. It is a disorder of sex development. Affected individuals have a 46,XY karyotype but present as

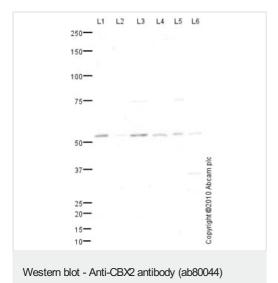
phenotypically normal females.

Sequence similarities Contains 1 A.T hook DNA-binding domain.

Contains 1 chromo domain.

Cellular localization Nucleus.

# Images



All lanes: Anti-CBX2 antibody (ab80044) at 1 µg/ml

Lane 1 : JEG-3 (Human placental choriocarcinoma cell line) Whole Cell Lysate

**Lane 2**: HUVEC (Human Umbilical Vein Endothelial Cell) Whole Cell Lysate

**Lane 3**: HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

Lane 4 : MEL-1 (Human embryonic stem cell, male cell line) Whole Cell Lysate (ab27198)

**Lane 5 :** MEL-2 (Human embryonic stem cell, female cell line) Whole Cell Lysate (ab27196)

Lane 6: Human testis tissue lysate - total protein (ab30257)

Lysates/proteins at 10 µg per lane.

### Secondary

 $\begin{tabular}{ll} \textbf{All lanes:} Goat polyclonal to Rabbit lgG - H\&L - Pre-Adsorbed (HRP) at 1/3000 dilution \end{tabular}$ 

Developed using the ECL technique.

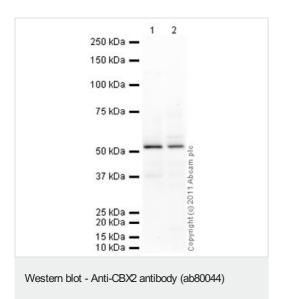
Performed under reducing conditions.

**Predicted band size:** 56 kDa **Observed band size:** 52 kDa

Additional bands at: 36 kDa, 75 kDa. We are unsure as to the

identity of these extra bands.

Exposure time: 20 minutes



All lanes: Anti-CBX2 antibody (ab80044) at 1 µg/ml

Lane 1 : HeLa (Human epithelial carcinoma cell line) Nuclear Lysate

Lane 2: NIH 3T3 (Mouse embryonic fibroblast cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

## Secondary

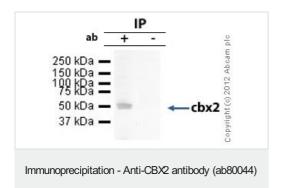
**All lanes :** Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (HRP), pre-adsorbed at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 56 kDa Observed band size: 56 kDa

Exposure time: 8 minutes



cbx2 was immunoprecipitated using 0.5mg Hela whole cell extract,  $5\mu g$  of Rabbit polyclonal to cbx2 and  $50\mu l$  of protein G magnetic beads (+). No antibody was added to the control (-).

The antibody was incubated under agitation with Protein G beads for 10min, Hela whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab80044.

Secondary: Mouse monoclonal [SB62a] Secondary Antibody to Rabbit lgG light chain (HRP) (ab99697).

Band: 52kDa: cbx2.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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