

## Product datasheet

# Human CBX1 (HP1 beta) knockout HEK-293T cell pellet ab278871

[2 Images](#)

### Overview

<b>Product name</b>	Human CBX1 (HP1 beta) knockout HEK-293T cell pellet
<b>Product overview</b>	<p>Abcam's knockout cell pellets give you access to native proteins, without the need to culture cells. Our knockout cell pellets are prepared from our single-gene knockout cell lines and provide an additional offering to our cell lysates.</p> <p>Cells are snap-frozen to provide high quality pellets that are suitable for extraction with alternative lysis buffers or for preparation of lysates from subcellular fractions. Our knockout cell pellets are suitable for a variety of applications, including PCR, gene expression profiling and DNA library preparation.</p>
<b>Parental Cell Line</b>	HEK293T
<b>Organism</b>	Human
<b>Mutation description</b>	Knockout achieved by using CRISPR/Cas9, 10 bp deletion in exon2.
<b>Passage number</b>	<20
<b>Knockout validation</b>	Sanger Sequencing, Western Blot (WB)
<b>Notes</b>	<p><b>Pellet size:</b> 5 million cells/vial.</p> <p>This product is subject to limited use licenses from The Broad Institute and ERS Genomics Limited, and is developed with patented technology. For full details of the limited use licenses and relevant patents please refer to our <a href="#">limited use license</a> and <a href="#">patent pages</a>.</p>
<b>Tested applications</b>	<b>Suitable for:</b> WB

### Properties

**Storage instructions** Store at -80°C. Please refer to protocols.

Components	1 kit
Human CBX1 knockout HEK293T cell pellet	1 vial
ab286211 - Human wild-type HEK293T cell pellet	1 vial

**Cell type** epithelial

**STR Analysis** Amelogenin X D5S818: 8, 9 D13S317: 12, 14 D7S820: 11 D16S539: 9, 13 vWA: 16, 19 TH01: 7, 9.3 TPOX: 11 CSF1PO: 11, 12

## Target

**Function** Component of heterochromatin. Recognizes and binds histone H3 tails methylated at 'Lys-9', leading to epigenetic repression. Interaction with lamin B receptor (LBR) can contribute to the association of the heterochromatin with the inner nuclear membrane.

**Tissue specificity** Expressed in all adult and embryonic tissues.

**Sequence similarities** Contains 2 chromo domains.

**Post-translational modifications** Not phosphorylated. Ubiquitinated.

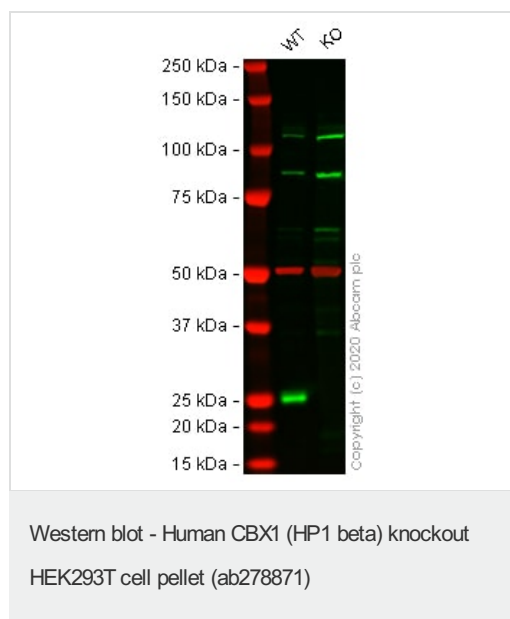
**Cellular localization** Nucleus. Unassociated with chromosomes during mitosis.

## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab278871 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
WB		Use at an assay dependent concentration. Predicted molecular weight: 21 kDa.

## Images



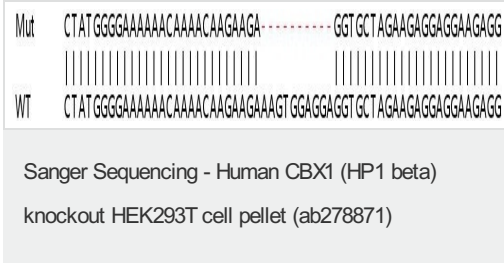
**Lane 1:** Wild-type HEK-293T cell lysate (20µg)

**Lane 2:** CBX1 knockout HEK-293T cell lysate (20µg)

**Lanes 1-2:** Merged signal (red and green). Green - [ab10478](#) observed at 26 kDa. Red - loading control [ab7291](#) observed at 50 kDa.

[ab10478](#) Anti-CBX1 / HP1 beta antibody was shown to specifically react with CBX1 / HP1 beta in wild-type HEK-293T cells in western blot. Loss of signal was observed when knockout cell line [ab266356](#) (knockout cell lysate [ab257383](#)) was used. Wild-type and CBX1 / HP1 beta knockout samples were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. [ab10478](#) and Anti-alpha Tubulin antibody [DM1A] - Loading Control ([ab7291](#)) were

incubated overnight at 4 °C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Homozygous: 10 bp deletion in exon2

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

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