

## Product datasheet

# Human BAX knockout HeLa cell pellet ab278962

[4 Images](#)

### Overview

<b>Product name</b>	Human BAX knockout HeLa 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>	HeLa
<b>Organism</b>	Human
<b>Mutation description</b>	Knockout achieved by using CRISPR/Cas9, 1 bp deletion in exon 2 and Insertion of the selection cassette in exon 2.
<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, ERS Genomics Limited and Sigma-Aldrich Co. LLC, and is developed with patented technology. For full details of the licenses and 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 BAX knockout HeLa cell pellet	1 vial
Human wild-type HeLa cell pellet	1 vial

**Cell type** epithelial

**Disease** Adenocarcinoma  
**Gender** Female  
**STR Analysis** Amelogenin X D5S818: 11, 12 D13S317: 12, 13.3 D7S820: 8, 12 D16S539: 9, 10 WWA: 16, 18 TH01: 7 TPOX: 8, 12 CSF1PO: 9, 10

## Target

---

**Function** Accelerates programmed cell death by binding to, and antagonizing the apoptosis repressor BCL2 or its adenovirus homolog E1B 19k protein. Under stress conditions, undergoes a conformation change that causes translocation to the mitochondrion membrane, leading to the release of cytochrome c that then triggers apoptosis. Promotes activation of CASP3, and thereby apoptosis.

**Tissue specificity** Expressed in a wide variety of tissues. Isoform Psi is found in glial tumors. Isoform Alpha is expressed in spleen, breast, ovary, testis, colon and brain, and at low levels in skin and lung. Isoform Sigma is expressed in spleen, breast, ovary, testis, lung, colon, brain and at low levels in skin. Isoform Alpha and isoform Sigma are expressed in pro-myelocytic leukemia, histiocytic lymphoma, Burkitt's lymphoma, T-cell lymphoma, lymphoblastic leukemia, breast adenocarcinoma, ovary adenocarcinoma, prostate carcinoma, prostate adenocarcinoma, lung carcinoma, epidermoid carcinoma, small cell lung carcinoma and colon adenocarcinoma cell lines.

**Sequence similarities** Belongs to the Bcl-2 family.

**Domain** Intact BH3 motif is required by BIK, BID, BAK, BAD and BAX for their pro-apoptotic activity and for their interaction with anti-apoptotic members of the Bcl-2 family.

**Cellular localization** Cytoplasm and Mitochondrion membrane. Cytoplasm. Colocalizes with 14-3-3 proteins in the cytoplasm. Under stress conditions, undergoes a conformation change that causes release from JNK-phosphorylated 14-3-3 proteins and translocation to the mitochondrion membrane.

---

## Applications

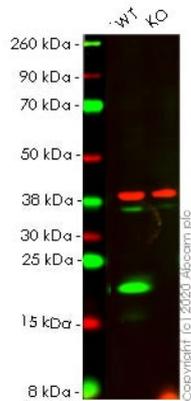
---

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab278962 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

---



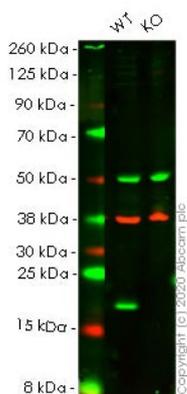
Western blot - Human BAX knockout HeLa cell pellet (ab278962)

**Lane 1:** Wild-type HeLa cell lysate (20µg)

**Lane 2:** BAX knockout HeLa cell lysate (20µg)

**Lanes 1- 2:** Merged signal (red and green). Green - [ab182734](#) observed at 21 kDa. Red - loading control [ab8245](#) observed at 37 kDa.

[ab182734](#) Recombinant Anti-Bax antibody [EPR18284] was shown to specifically react with BAX in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line [ab255363](#) (knockout cell lysate [ab263841](#)) was used. Wild-type and BAX 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. [ab182734](#) and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) 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.



Western blot - Human BAX knockout HeLa cell pellet (ab278962)

**Lane 1:** Wild-type HeLa cell lysate (20µg)

**Lane 2:** BAX knockout HeLa cell lysate (20µg)

**Lanes 1- 2:** Merged signal (red and green). Green - [ab32503](#) observed at 21 kDa. Red - loading control [ab8245](#) observed at 37 kDa.

[ab32503](#) Recombinant Anti-Bax antibody [E63] was shown to specifically react with BAX in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line [ab255363](#) (knockout cell lysate [ab263841](#)) was used. Wild-type and BAX 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. [ab32503](#) and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) 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.

```
Mut  GGCCACCAGCTCTGAGCAGATCATGAAGA-AGGGGCCCTTTTGCTTCAGGGGTGAGTTT
      |||
WT   GGCCACCAGCTCTGAGCAGATCATGAAGACAGGGGCCCTTTTGCTTCAGGGGTGAGTTT
```

Sanger Sequencing - Human BAX knockout HeLa cell pellet (ab278962)

Allele-1: 1 bp deletion in exon 2

```
Mut  CTCTGAGCAGATCATGAAGA****Insertion*****CAGGGGCCCTTTTGCTTCAG
      |||
WT   CTCTGAGCAGATCATGAAGA                CAGGGGCCCTTTTGCTTCAG
```

Sanger Sequencing - Human BAX knockout HeLa cell pellet (ab278962)

Allele-2: Insertion of the selection cassette in exon 2

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

### Our Abpromise to you: Quality guaranteed and expert technical support

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors