abcam

Product datasheet

Human BCL10 knockout HeLa cell line ab261797

3 Images

Overview

Product name	Human BCL10 knockout HeLa cell line
Parental Cell Line	HeLa
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, Homozygous: 1 bp insertion in exon 1
Passage number	<20
Knockout validation	Sanger Sequencing, Western Blot (WB)
Tested applications	**Suitable for:** WB
Biosafety level	2
General notes	**Recommended control:** Human wild-type HeLa cell line (**ab255928**). Please note a wild-type cell line is not automatically included with a knockout cell line order, if required please add recommended wild-type cell line at no additional cost using the code WILDTYPE-TMTK1. **Cryopreservation cell medium:** Cell Freezing Medium-DMSO Serum free media, contains 8.7% DMSO in MEM supplemented with methyl cellulose. **Culture medium:** DMEM (High Glucose) + 10% FBS **Initial handling guidelines:** Upon arrival, the vial should be stored in liquid nitrogen vapor phase and not at -80°C. Storage at -80°C may result in loss of viability. 1. Thaw the vial in 37°C water bath for approximately 1-2 minutes. 2. Transfer the cell suspension (0.8 mL) to a 15 mL/50 mL conical sterile polypropylene centrifuge tube containing 8.4 mL pre-warmed culture medium, wash vial with an additional 0.8 mL culture medium (total volume 10 mL) to collect remaining cells, and centrifuge at 201 x g (rcf) for 5 minutes at room temperature. 10 mL represents minimum recommended dilution. 20 mL represents maximum recommended dilution. 3. Resuspend the cell pellet in 5 mL pre-warmed culture medium and count using a haemocytometer or alternative cell counting method. Based on cell count, seed cells in an appropriate cell culture flask at a density of $2x10^4$ cells/cm^2. Seeding density is given as a guide only and should be scaled to align with individual lab schedules. 4. Incubate the culture at 37°C incubator with 5% CO_2. Cultures should be monitored daily. **Subculture guidelines:** All seeding densities should be based on cell counts gained by established methods. A guide seeding density of $2x10^4$ cells/cm^2 is recommended. A partial media change 24 hours prior to subculture may be helpful to encourage growth, if required.

Cells should be passaged when they have achieved 80-90% confluence.
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We will provide viable cells that proliferate on revival.

Properties

Number of cells	1 x 10^6 cells/vial, 1 mL
Adherent /Suspension	Adherent
Tissue	Cervix
Cell type	epithelial
Disease	Adenocarcinoma
Gender	Female
STR Analysis	Amelogenin X D5S818: 11, 12 D13S317: 12, 13.3 D7S820: 8, 12 D16S539: 9, 10 vWA: 16, 18 TH01: 7 TPOX: 8, 12 CSF1PO: 9, 10
Antibiotic resistance	Puromycin 1.00µg/ml
Mycoplasma free	Yes
Storage instructions	Shipped on Dry Ice. Store in liquid nitrogen.
Storage buffer	Constituents: 8.7% Dimethylsulfoxide, 2% Cellulose, methyl ether

Target

Function	Promotes apoptosis, pro-caspase-9 maturation and activation of NF-kappa-B via NIK and IKK. May be an adapter protein between upstream TNFR1-TRADD-RIP complex and the downstream NIK-IKK-IKAP complex. Is a substrate for MALT1.
Tissue specificity	Ubiquitous.
Involvement in disease	Note=A chromosomal aberration involving BCL10 is recurrent in low-grade mucosa-associated lymphoid tissue (MALT lymphoma). Translocation t(1;14)(p22;q32). Although the BCL10/IgH translocation leaves the coding region of BCL10 intact, frequent BCL10 mutations could be attributed to the Ig somatic hypermutation mechanism resulting in nucleotide transitions. Note=Defects in BCL10 are involved in various types of cancer.
Sequence similarities	Contains 1 CARD domain.
Post-translational modifications	Phosphorylated. Phosphorylation results in dissociation from TRAF2 and binding to BIRC2/c-IAP2.
Cellular localization	Cytoplasm > perinuclear region. Membrane raft. Appears to have a perinuclear, compact and filamentous pattern of expression. Also found in the nucleus of several types of tumor cells. Colocalized with DPP4 in membrane rafts.

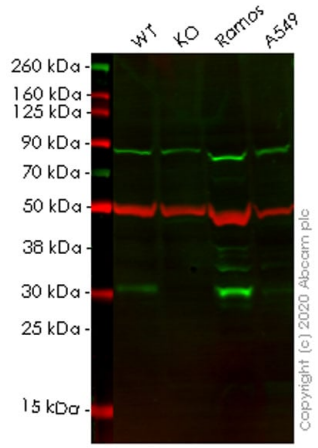
Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab261797 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: 26 kDa.

Images



Western blot - Human BCL10 knockout HeLa cell line (ab261797)

All lanes : Anti-Bcl10 antibody [EPR8587] (**ab150380**) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate
Lane 2 : BCL10 knockout HeLa cell lysate
Lane 3 : Romas cell lysate
Lane 4 : A549 cell lysate

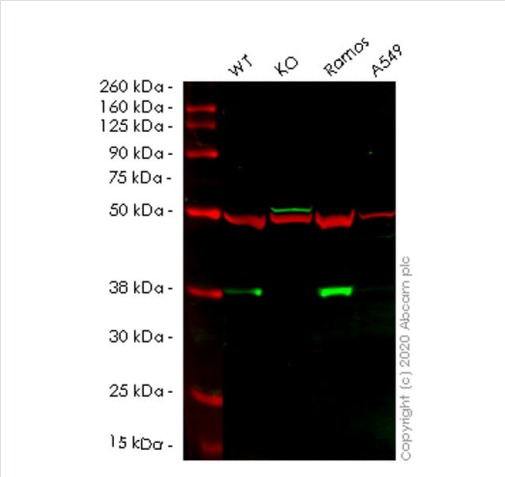
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 26 kDa
Observed band size: 32 kDa

Lanes 1-4: Merged signal (red and green). Green - **ab150380** observed at 32 kDa. Red - loading control, **ab7291** observed at 52 kDa.

ab150380 Anti-Bcl10 antibody [EPR8587] was shown to specifically react with Bcl10 in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab261797 (knockout cell lysate **ab257144**) was used. Wild-type and Bcl10 knockout samples were subjected to SDS-PAGE. **ab150380** 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 10000 dilution for 1 hour at room temperature before imaging.



Western blot - Human BCL10 knockout HeLa cell line (ab261797)

All lanes : Anti-Bcl10 antibody [EP606Y] (**ab33905**) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate
Lane 2 : BCL10 knockout HeLa cell lysate
Lane 3 : Romas cell lysate
Lane 4 : A549 cell lysate

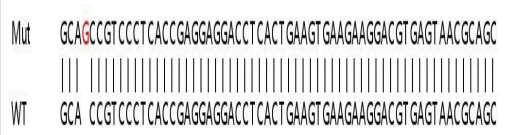
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 26 kDa
Observed band size: 32 kDa

Lanes 1-4: Merged signal (red and green). Green - **ab33905** observed at 32 kDa. Red - loading control, **ab7291** observed at 52 kDa.

ab33905 Anti-Bcl10 antibody [EP606Y] was shown to specifically react with Bcl10 in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab261797 (knockout cell lysate **ab257144**) was used. Wild-type and Bcl10 knockout samples were subjected to SDS-PAGE. **ab33905** 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 10000 dilution for 1 hour at room temperature before imaging.



Sanger Sequencing - Human BCL10 knockout HeLa cell line (ab261797)

Homozygous: 1 bp insertion in exon 1.

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