

Product datasheet

Human PCBD1 knockout HEK-293T cell lysate ab258095

2 Images

Overview

Product name	Human PCBD1 knockout HEK-293T cell lysate
Product overview	Knockout cell lysate achieved by CRISPR/Cas9.
Parental Cell Line	HEK293T
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, Insertion of the selection cassette in exon2.
Passage number	<20
Knockout validation	Sanger Sequencing, Western Blot (WB)
Reconstitution notes	To use as WB control, resuspend the lyophilizate in 50 µL of LDS* Sample Buffer to have a final concentration of 2 mg/ml. For reducing conditions, we recommend a final concentration of 0.1 M DTT.

**Usage of SDS sample buffer is not recommended with these lyophilized lysates.*

Notes

Lysate preparation: Our lysates are made using RIPA buffer to which we add a protease inhibitor cocktail and phosphatase inhibitor cocktail (ratio: 300:100:10). *This means that the protein of interest is denatured.* If you require a native form of the protein please use the live cell version - found [here](#). Please refer to our lysis protocol for further details on how our lysates are prepared.

User storage instructions: Lyophilizate may be stored at 4°C. After reconstitution, store at -20°C for short-term storage or -80°C for long-term storage.

Access thousands of knockout cell lysates, generated from commonly used cancer cell lines.

[See here for more information on knockout cell lysates.](#)

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Tested applications

Suitable for: WB

Properties

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

Components	1 kit
ab261141 - Human PCBD1 knockout HEK293T cell lysate	1 x 100µg
ab255553 - Human wild-type HEK293T cell lysate	1 x 100µg

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 Involved in tetrahydrobiopterin biosynthesis. Seems to both prevent the formation of 7-pterins and accelerate the formation of quinonoid-BH2. Coactivator for HNF1A-dependent transcription. Regulates the dimerization of homeodomain protein HNF1A and enhances its transcriptional activity.

Involvement in disease Defects in PCBD1 are the cause of BH4-deficient hyperphenylalaninemia type D (HPABH4D) [MIM:264070]; also known as hyperphenylalaninemia with primapterinuria. HPABH4D is characterized by the excretion of 7-substituted pterins in the urine of affected patients.

Sequence similarities Belongs to the pterin-4-alpha-carbinolamine dehydratase family.

Cellular localization Cytoplasm. Nucleus. Cytoplasmic and/or nuclear.

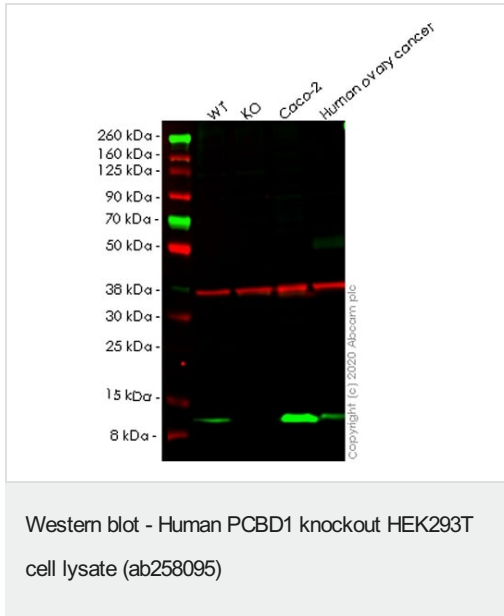
Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab258095 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: 12 kDa.

Images



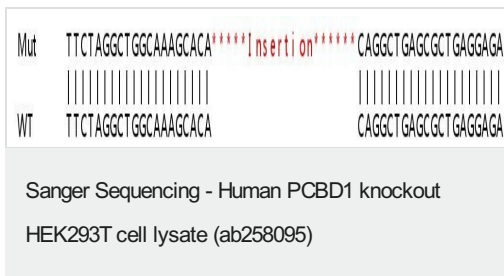
Lane 1: Wild-type HEK293T cell lysate (20 ug)

Lane 2: PCBD1 knockout HEK293T cell lysate (20 ug)

Lane 3: Caco-2 cell lysate (20 ug)

Lane 4: Human ovary cancer tissue lysate (20 ug)

ab138518 was shown to specifically react with PCBD1 in wild-type HEK293T cells. Loss of signal was observed when knockout cell line **ab266261** (knockout cell lysate ab258095) was used. Wild-type and PCBD1 knockout samples were subjected to SDS-PAGE. **ab138518** and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 500 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: Insertion of the selection cassette in exon2

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