

Product datasheet

Human CDKN2C (p18 INK4c) knockout HeLa cell lysate ab257887

5 Images

Overview	

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Product name	Human CDKN2C (p18 INK4c) knockout HeLa cell lysate	
Product overview		
	Knockout cell lysate achieved by CRISPR/Cas9.	
Parental Cell Line	HeLa	
Organism	Human	
Mutation description	Knockout achieved by using CRISPR/Cas9, 1 bp insertion in exon 1 and 4 bp deletion in exon 1 and 7 bp deletion in exon 1 and Insertion of the selection cassette in exon 1.	
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). <i>This means that the protein of interest is denatured.</i> 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.	
	Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances. It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.	
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Properties

Storage instructions	Store at -80°C. Please refer to protocols.		
Components			
Human wild-type HeLa cell lysate		1 x 100µg	
Human CDKN2C knockout HeLa cell lysate		1 x 100µg	
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		
Target			

Function	Interacts strongly with CDK6, weakly with CDK4. Inhibits cell growth and proliferation with a correlated dependence on endogenous retinoblastoma protein RB.	
Tissue specificity	Highest levels found in skeletal muscle. Also found in pancreas and heart.	
Sequence similarities	Belongs to the CDKN2 cyclin-dependent kinase inhibitor family. Contains 4 ANK repeats.	

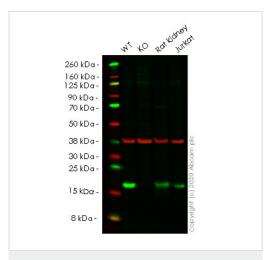
Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab257887 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: 18 kDa.

Images



Western blot - Human CDKN2C knockout HeLa cell lysate (ab257887)

Sanger Sequencing - Human CDKN2C knockout HeLa cell lysate (ab257887)

Mu

WT

Sanger Sequencing - Human CDKN2C knockout HeLa cell lysate (ab257887)

Mut TGGGGGAACGATTGGCGTCCGCAGCGTGCCAGGGGGGACCTAGAGCAACTTACTAGTTT

Sanger Sequencing - Human CDKN2C knockout HeLa cell lysate (ab257887) Lane 1: Wild-type HeLa cell lysate (20 µg) Lane 2: CDKN2C knockout HeLa cell lysate (20 µg)

Lane 3: Rat Kidney cell lysate (20 µg)

Lane 4: Jurkat cell lysate (20 µg)

Lanes 1-4: Merged signal (red and green). Green - ab192239 observed at 18 kDa. Red - loading control ab8245 observed at 37 kDa.

ab192239 Anti-p18 INK4c/CDKN2C antibody [EPR15891] was shown to specifically react with Cyclin Dependent Kinase Inhibitor 2C in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab265031 (knockout cell lysate ab257887) was used. Wild-type and Cyclin Dependent Kinase Inhibitor 2C knockout samples were subjected to SDS-PAGE. ab192239 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.

Allele-1: 7 bp deletion in exon 1

Allele-2: 4 bp deletion in exon 1

Allele-3: 1 bp insertion in exon 1

Mut CGAGTTGGCGTCCGCAGCTG'****Insertion

CCAGGGGGGGGGCCTAGAGCAA

Allele-4: Insertion of the selection cassette in exon 1

Sanger Sequencing - Human CDKN2C knockout HeLa cell lysate (ab257887)

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