

Product datasheet

Human ATF3 knockout HeLa cell lysate ab257073

3 Images

Overview

Product name	Human ATF3 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, 2 bp deletion in exon 2 and 5 bp deletion in exon 2.
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
ab260113 - Human ATF3 knockout HeLa cell lysate	1 x 100µg
ab255552 - Human wild-type 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 This protein binds the cAMP response element (CRE) (consensus: 5'-GTGACGT[AC][AG]-3'), a sequence present in many viral and cellular promoters. Represses transcription from promoters with ATF sites. It may repress transcription by stabilizing the binding of inhibitory cofactors at the promoter. Isoform 2 activates transcription presumably by sequestering inhibitory cofactors away from the promoters.

Sequence similarities Belongs to the bZIP family. ATF subfamily.
Contains 1 bZIP domain.

Cellular localization Nucleus.

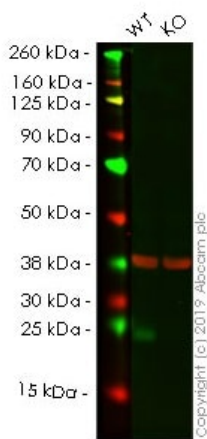
Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab257073 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.

Images



Western blot - Human ATF3 knockout HeLa cell lysate (ab257073)

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

Lane 2: ATF3 knockout HeLa cell lysate (20µg)

Lanes 1- 2: Merged signal (red and green). Green - [ab207434](#) observed at 21 kDa. Red - loading control [ab8245](#) observed at 37 kDa.

[ab207434](#) Anti-ATF3 antibody [EPR19488] - ChIP Grade was shown to specifically react with ATF3 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line [ab264908](#) (knockout cell lysate ab257073) was used. Wild-type and ATF3 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. [ab207434](#) 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  GCTAACCTGACGCCCTTG-...-GAAGAGCTGAGGTTTCCATCCAGAACAAGCACCTC
      |||
WT   GCTAACCTGACGCCCTTGTCAAGGAAGAGCTGAGGTTTCCATCCAGAACAAGCACCTC
  
```

Sanger Sequencing - Human ATF3 knockout HeLa cell lysate (ab257073)

Allele-1: 5 bp deletion in exon 2

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Mut  GCTAACCTGACGCCCTTG--AAGGAAGAGCTGAGGTTTCCATCCAGAACAAGCACCTC
      |||
WT   GCTAACCTGACGCCCTTGTCAAGGAAGAGCTGAGGTTTCCATCCAGAACAAGCACCTC
  
```

Sanger Sequencing - Human ATF3 knockout HeLa cell lysate (ab257073)

Allele-2: 2 bp deletion in exon 2

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