

Product datasheet

Human ETFA knockout HEK-293T cell lysate ab257943

2 Images

Overview

Product name	Human ETFA 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, Homozygous: 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. <i>*Usage of SDS sample buffer is not recommended with these lyophilized lysates.</i>

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
ab260398 - Human ETFA 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 The electron transfer flavoprotein serves as a specific electron acceptor for several dehydrogenases, including five acyl-CoA dehydrogenases, glutaryl-CoA and sarcosine dehydrogenase. It transfers the electrons to the main mitochondrial respiratory chain via ETF-ubiquinone oxidoreductase (ETF dehydrogenase).

Involvement in disease Glutaric aciduria 2A

Sequence similarities Belongs to the ETF alpha-subunit/FixB family.

Domain Domain I shares an identical polypeptide fold with the beta subunit ETFB though there is no sequence similarity.

Post-translational modifications The N-terminus is blocked.

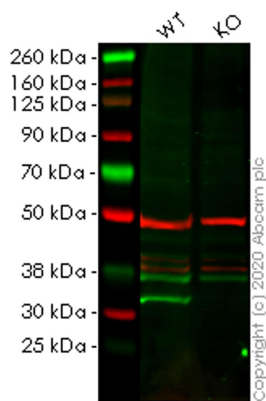
Cellular localization Mitochondrion matrix.

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab257943 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: 35 kDa.

Images



Western blot - Human ETFA knockout HEK293T cell lysate (ab257943)

Lane 1: Wild-type HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate (40 ug)

Lane 2: ETFA knockout HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate (40 ug)

ab110316 was shown to specifically react with ETFA in wild-type HEK-293T cells. Loss of signal was observed when knockout cell line **ab266513** (knockout cell lysate ab257943) was used. Wild-type and ETFA knockout samples were subjected to SDS-PAGE. **ab110316** and Anti-beta Tubulin [EP1331Y] - Microtubule Marker (**ab52901**) 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® 680RD) preadsorbed (**ab216777**) and Goat anti-Mouse IgG H&L (IRDye® 800CW) preadsorbed (**ab216772**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

Mut	GCCCCGGAGCCGCCGCTCGG****Insertion*****AACATGGTCTCCGCTCCGC
WT	GCCCCGGAGCCGCCGCTCGG AACATGGTCTCCGCTCCGC

Sanger Sequencing - Human ETFA knockout HEK293T cell lysate (ab257943)

Homozygous: Insertion of the selection cassette in exon 1

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