abcam

Product datasheet

Human TFG (TRK fused gene) knockout HeLa cell lysate ab257738

4 Images

Overview

Product name Human TFG (TRK fused gene) 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, 19 bp deletion in exon2 and Insertion of the selection

cassette in exon2.

Passage number <20

Knockout validation Sanger Sequencing, Western Blot (WB)

Reconstitution notesTo 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 <u>here</u>. 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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products that contain European Authorisation list (Annex XIV) substances. It is the responsibility of our customers to check the necessity of application of REACH

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This product is subject to limited use licenses from The Broad Institute, ERS Genomics Limited and Sigma-Aldrich Co. LLC, and is developed with patented technology. For full details of the

licenses and patents please refer to our limited use license and patent pages.

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Properties

Storage instructions

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

Components	1 kit
ab262972 - Human TFG knockout HeLa cell lysate	1 x 100µg
ab255929 - 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

Tissue specificity

Ubiquitous.

Involvement in disease

Defects in TFG are a cause of thyroid papillary carcinoma (TPC) [MIM:188550]. TPC is a common tumor of the thyroid that typically arises as an irregular, solid or cystic mass from otherwise normal thyroid tissue. Papillary carcinomas are malignant neoplasm characterized by the formation of numerous, irregular, finger-like projections of fibrous stroma that is covered with a surface layer of neoplastic epithelial cells. Note=A chromosomal aberration involving TFG is found in thyroid papillary carcinomas. Translocation t(1;3)(q21;q11) with NTRK1. The TFG sequence is fused to the 3'-end of NTRK1 generating the TRKT3 (TRK-T3) fusion transcript.

Applications

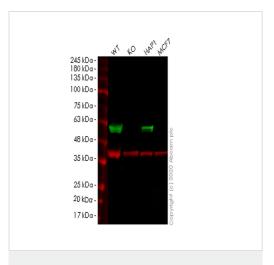
The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab257738 in the following tested applications.

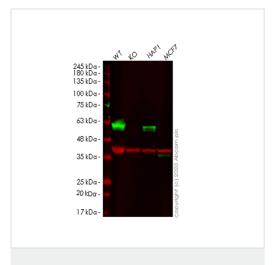
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 43 kDa.

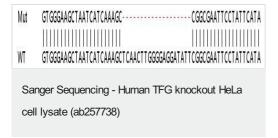
Images



Western blot - Human TFG knockout HeLa cell lysate (ab257738)



Western blot - Human TFG knockout HeLa cell lysate (ab257738)



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

Lane 2:TFG knockout HeLa cell lysate (20 ug)

Lane 3:HAP-1 cell lysate (20 ug)

Lane 4:MCF7 cell lysate (20 ug)

<u>ab156866</u> was shown to specifically react with TFG in wild-type HeLa cells. Loss of signal was observed when knockout cell line <u>ab265841</u> (knockout cell lysate ab257738) was used. Wild-type and TFG knockout samples were subjected to SDS-PAGE. <u>ab156866</u> and Anti-GAPDH antibody [6C5] - Loading Control (<u>ab8245</u>) 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 (<u>ab216773</u>) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

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

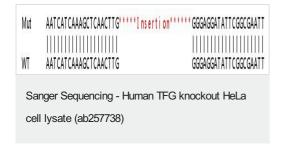
Lane 2:TFG knockout HeLa cell lysate (20 ug)

Lane 3:HAP-1 cell lysate (20 ug)

Lane 4:MCF7 cell lysate (20 ug)

ab150428 was shown to specifically react with TFG in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab265841 (knockout cell lysate ab257738) was used. Wild-type and TFG knockout samples were subjected to SDS-PAGE. ab150428 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: 19 bp deletion in exon2



Allele-2: Insertion of the selection cassette in exon2

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