abcam

Product datasheet

Human PDGFRA knockout SH-SY5Y cell lysate ab275522

3 Images

Overview

Product name Human PDGFRA knockout SH-SY5Y cell lysate

Product overview

Knockout cell lysate achieved by CRISPR/Cas9.

Parental Cell Line SHSY-5Y

Organism Human

Mutation description Knockout achieved by using CRISPR/Cas9, Homozygous: 67 bp deletion in exon 3

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 **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.

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Authorisation, and any other relevant authorisations, for their intended uses.

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Limited, and is developed with patented technology. For full details of the limited use licenses and

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

Tested applications Suitable for: WB

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Properties

Storage instructions

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

Components	1 kit
ab277349 - Human PDGFRA knockout SHSY-5Y cell lysate	1 x 100µg
ab277350 - Human wild-type SHSY-5Y cell lysate	1 x 100µg

Cell type neuroblastoma

Disease Neuroblastoma

Target

Gender

Function Receptor that binds both PDGFA and PDGFB and has a tyrosine-protein kinase activity.

Tissue specificity Expressed in primary and metastatic colon tumors and in normal colon tissue. Tumors may

express a different isoform to that found in normal tissue.

Involvement in diseaseNote=A chromosomal aberration involving PDGFRA is found in some cases of hypereosinophilic

syndrome. Interstitial chromosomal deletion del(4)(q12q12) causes the fusion of FIP1L1 and

PDGFRA (FIP1L1-PDGFRA).

Sequence similarities Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1/PDGF receptor

subfamily.

Female

Contains 5 lg-like C2-type (immunoglobulin-like) domains.

Contains 1 protein kinase domain.

Cellular localization Membrane.

Applications

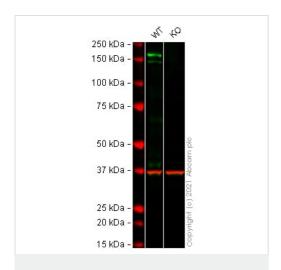
The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab275522 in the following tested applications.

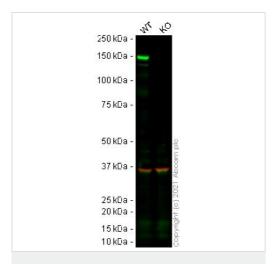
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration.

Images



Western blot - Human PDGFRA knockout SHSY-5Y cell lysate (ab275522)



Western blot - Human PDGFRA knockout SHSY-5Y cell lysate (ab275522)

Lane 1: Wild-type SH-SY5Y cell lysate 40 µg

Lane 2: PDGFRA knockout SH-SY5Y cell lysate 40 µg

Lanes 1 - 2:Merged signal (red and green). Green - <u>ab134123</u> observed at 180 kDa. Red - loading control <u>ab8245</u> (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa.

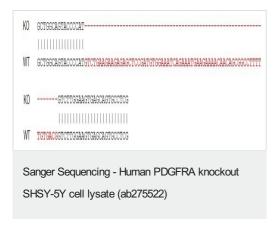
<u>ab134123</u> was shown to react with PDGFR alpha in wild-type SH-SY5Y cells in Western blot with loss of signal observed in PDGFRA knockout cell line <u>ab275335</u> (knockout cell lysate ab275522). Wild-type SH-SY5Y and PDGFRA knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween[®]) before incubation with <u>ab134123</u> and <u>ab8245</u> (Mouse anti-GAPDH antibody [6C5]) overnight at 4 °C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit lgG H&L (IRDye[®] 800CW) preabsorbed (<u>ab216773</u>) and Goat anti-Mouse lgG H&L (IRDye[®] 680RD) preabsorbed (<u>ab216776</u>) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.

Lane 1: Wild-type SH-SY5Y cell lysate 40 µg

Lane 2: PDGFRA knockout SH-SY5Y cell lysate 40 µg

Lanes 1 - 2: Merged signal (red and green). Green - <u>ab203491</u> observed at 150 kDa. Red - loading control <u>ab8245</u> (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa.

ab203491 was shown to react with PDGFR alpha in wild-type SH-SY5Y cells in Western blot with loss of signal observed in PDGFRA knockout cell line ab275335 (knockout cell lysate ab275522). Wild-type SH-SY5Y and PDGFRA knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween®) before incubation with ab203491 and ab8245 (Mouse anti-GAPDH antibody [6C5]) overnight at 4 °C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preabsorbed (ab216773) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preabsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.



Allele-1: 67 bp deletion in exon 3

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