

## Product datasheet

# Human GNA13 knockout HeLa cell lysate ab257451

3 Images

### Overview

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<b>Product name</b>	Human GNA13 knockout HeLa cell lysate
<b>Product overview</b>	Knockout cell lysate achieved by CRISPR/Cas9.
<b>Parental Cell Line</b>	HeLa
<b>Organism</b>	Human
<b>Mutation description</b>	Knockout achieved by using CRISPR/Cas9, Insertion of the selection cassette in exon 2.
<b>Passage number</b>	<20
<b>Knockout validation</b>	Sanger Sequencing, Western Blot (WB)
<b>Reconstitution notes</b>	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

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**Storage instructions** Store at -80°C. Please refer to protocols.

Components	1 kit
ab260240 - Human GNA13 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

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**Function** Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems.  
**Sequence similarities** Belongs to the G-alpha family. G(12) subfamily.  
**Post-translational modifications** Palmitoylation is critical for proper membrane localization and signaling. Phosphorylation on Thr-203 by PKA destabilizes the heterotrimer of alpha, beta and gamma, and inhibits Rho activation.  
**Cellular localization** Membrane. Melanosome. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

## Applications

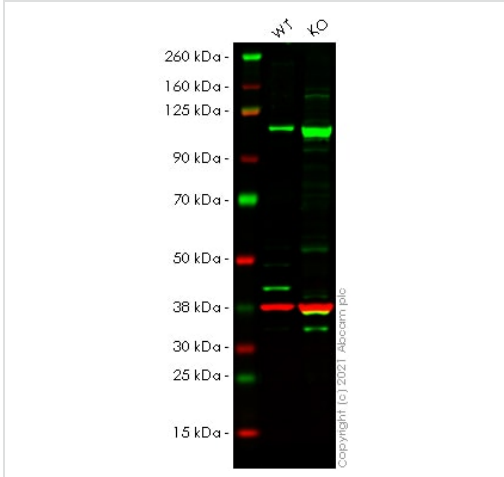
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**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab257451 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 44 kDa.

## Images

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Western blot - Human GNA13 knockout HeLa cell lysate (ab257451)

**Lane 1:** wild-type HeLa cell lysate 20 ug

**Lane 2:** GNA13 knockout HeLa cell lysate 20 ug

**Lanes 1 - 2:** Merged signal (red and green). Green - **ab128900** observed at 45 kDa. Red - loading control **ab8245** (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa.

**ab128900** was shown to react with GNA13 in wild-type HeLa cells in Western blot with loss of signal observed in GNA13 knockout cell line **ab264846** (GNA13 knockout cell lysate ab257451). Wild-type HeLa and GNA13 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween®) before incubation with **ab128900** 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 IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.

Mut	CATGTTGTTGGTTGAGTTG*****Insertion*****TCTCCCCAGGGAATGAAG
WT	CATGTTGTTGGTTGAGTTG TCTCCCCAGGGAATGAAG

Sanger Sequencing - Human GNA13 knockout HeLa cell lysate (ab257451)

Allele-1: Insertion of the selection cassette in exon 2

Mut	GTTGGTTGAGTTGCTCCC*****Insertion*****CAGGGAATGAAGCTTCTC
WT	GTTGGTTGAGTTGCTCCC CAGGGAATGAAGCTTCTC

Sanger Sequencing - Human GNA13 knockout HeLa cell lysate (ab257451)

Allele-2: Insertion of the selection cassette in exon 2

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