

## Product datasheet

# Human MRAS knockout HeLa cell lysate ab257541

3 Images

### Overview

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<b>Product name</b>	Human MRAS 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, 1 bp insertion in exon3 and 2 bp deletion in exon3.
<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
ab261008 - Human MRAS 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

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**Function** May serve as an important signal transducer for a novel upstream stimuli in controlling cell proliferation. Weakly activates the MAP kinase pathway.

**Tissue specificity** Expression highly restricted to the brain and heart.

**Sequence similarities** Belongs to the small GTPase superfamily. Ras family.

**Cellular localization** Cell membrane.

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## Applications

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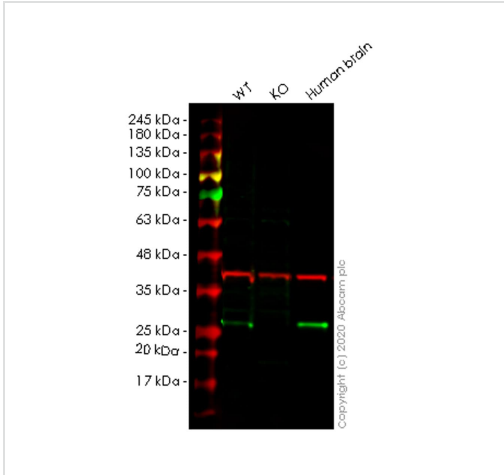
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab257541 in the following tested applications.

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: 24 kDa.

## Images

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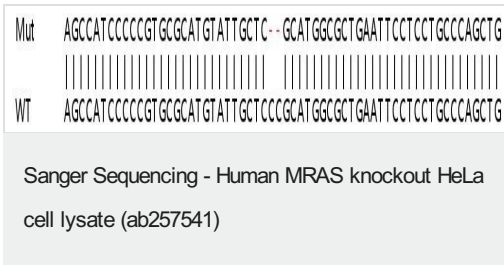
Western blot - Human MRAS knockout HeLa cell lysate (ab257541)

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

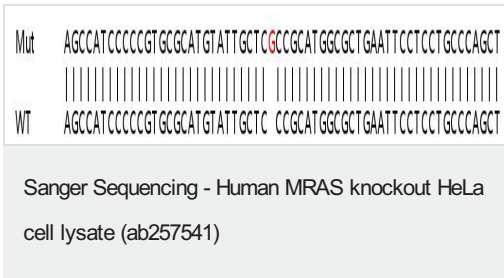
**Lane 2:** MRAS knockout HeLa cell lysate (20 ug)

**Lane 3:** Human brain tissue lysate (20 ug)

**ab176570** was shown to specifically react with MRAs in wild-type HeLa cells. Loss of signal was observed when knockout cell line **ab265510** (knockout cell lysate ab257541) was used. Wild-type and MRAs knockout samples were subjected to SDS-PAGE. **ab176570** and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated at room temperature for 2.5 hours 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: 2 bp deletion in exon3



Allele-2: 1 bp insertion in exon3

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