

## Product datasheet

# Human MAPK6 (ERK3) knockout HeLa cell lysate ab257526

2 Images

### Overview

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<b>Product name</b>	Human MAPK6 (ERK3) 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, Homozygous: 1 bp deletion 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. <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:** After reconstitution, store the lysate at -80°C.

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
ab260267 - Human MAPK6 knockout HeLa cell lysate (Lyophilized)	1 x 100µg
ab255552 - Human wild-type HeLa cell lysate (Lyophilized)	1 x 100µg

<b>Cell type</b>	epithelial
<b>Disease</b>	Adenocarcinoma
<b>Gender</b>	Female
<b>STR Analysis</b>	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**

<b>Function</b>	Phosphorylates microtubule-associated protein 2 (MAP2). May promote entry in the cell cycle.
<b>Tissue specificity</b>	Highest expression in the skeletal muscle, followed by the brain. Also found in heart, placenta, lung, liver, pancreas, kidney and skin fibroblasts.
<b>Sequence similarities</b>	Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily. Contains 1 protein kinase domain.
<b>Domain</b>	The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases.
<b>Post-translational modifications</b>	Dually phosphorylated on Thr-626 and Tyr-628, which activates the enzyme.

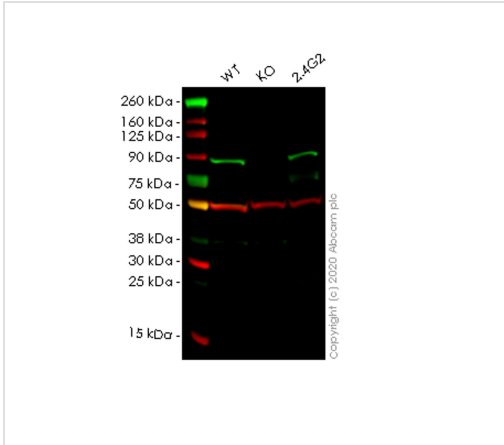
**Applications**

Our [Abpromise guarantee](#) covers the use of **ab257526** 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: 83 kDa.

**Images**



Western blot - Human MAPK6 knockout HeLa cell lysate (ab257526)

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

**Lane 2:** MAPK6 knockout HeLa cell lysate (20 ug)

**Lane 3:** 2.4G2 cell lysate (20 ug)

**ab53277** was shown to specifically react with MAPK6/ERK3 in wild-type HeLa cells. Loss of signal was observed when knockout cell line **ab264910** (knockout cell lysate ab257526) was used. Wild-type and MAPK6/ERK3 knockout samples were subjected to SDS-PAGE. **ab53277** 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.

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Mut  TCTGGG-TCTAGGTATATGGACTTAAAACCATTTGAGTTGTGGAGGCAATGGCTTGGTTTT
WT   TCTGGGTCTAGGTATATGGACTTAAAACCATTTGAGTTGTGGAGGCAATGGCTTGGTTTT
  
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Homozygous: 1 bp deletion in exon 2

Sanger Sequencing - Human MAPK6 knockout HeLa cell lysate (ab257526)

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