

## Product datasheet

# Human MTMR2 knockout HeLa cell lysate ab263262

2 Images

### Overview

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<b>Product name</b>	Human MTMR2 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, 2 bp deletion in exon 5 and Insertion of the selection cassette in exon 5.
<b>Passage number</b>	<20
<b>Knockout validation</b>	Sanger Sequencing
<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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### Properties

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

Components	1 kit
ab261568 - Human MTMR2 knockout HeLa cell lysate (Lyophilized)	1 x 100µg
ab255929 - Human Wild Type HeLa cell lysate (Lyophilized)	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

**Function** Phosphatase that acts on lipids with a phosphoinositol headgroup. Has phosphatase activity towards phosphatidylinositol-3-phosphate and phosphatidylinositol-3,5-bisphosphate.

**Involvement in disease** Defects in MTMR2 are the cause of Charcot-Marie-Tooth disease type 4B1 (CMT4B1) [MIM:601382]. CMT4B1 is a recessive, severe form of Charcot-Marie-Tooth disease, the most common inherited disorder of the peripheral nervous system. Charcot-Marie-Tooth disease is classified in two main groups on the basis of electrophysiologic properties and histopathology: primary peripheral demyelinating neuropathy and primary peripheral axonal neuropathy. Demyelinating CMT neuropathies are characterized by severely reduced nerve conduction velocities (less than 38 m/sec), segmental demyelination and remyelination with onion bulb formations on nerve biopsy, slowly progressive distal muscle atrophy and weakness, absent deep tendon reflexes, and hollow feet. By convention, autosomal recessive forms of demyelinating Charcot-Marie-Tooth disease are designated CMT4.

**Sequence similarities** Belongs to the protein-tyrosine phosphatase family. Non-receptor class myotubularin subfamily. Contains 1 GRAM domain. Contains 1 myotubularin phosphatase domain.

**Domain** The coiled-coil domain mediates interaction with SBF2.

**Cellular localization** Cytoplasm. Membrane. Partly associated with membranes.

## Images

Mut	CCTTGGTGTGATAAATAGAGTAGAAAAA-TGGTGGTGCTTCTAGTCGAGGTGAAAAATTC
WT	CCTTGGTGTGATAAATAGAGTAGAAAAAATGGTGGTGCTTCTAGTCGAGGTGAAAAATTC

Sanger Sequencing - Human MTMR2 knockout  
HeLa cell lysate (ab263262)

Allele-1: 2 bp deletion in exon 5

Mut	ATAAATAGAGTAGAAAAAT*****Insertion*****TGGTGGTGGTCTAGTCGAG
WT	ATAAATAGAGTAGAAAAAT TGGTGGTGGTCTAGTCGAG

Sanger Sequencing - Human MTMR2 knockout  
HeLa cell lysate (ab263262)

**Allele-2: Insertion of the selection cassette in exon 5**

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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