Human GCLM Knockdown Cell Line (WB-Validated)

Catalog #: C62007

Aliases

GCLM; Glutamate-Cysteine Ligase Modifier Subunit; GLCLR; Gamma-Glutamylcysteine Synthetase Regulatory Subunit; Glutamate--Cysteine Ligase Regulatory Subunit; Gamma-ECS Regulatory Subunit; GCS Light Chain; Glutamate-Cysteine Ligase (Gamma-Glutamylcysteine Synthetase), Regulatory (30.8kD); Glutamate-Cysteine Ligase Modifier Subunit Delta2 Alternative Splicing; Glutamate-Cysteine Ligase Regulatory Protein; Glutamate-Cysteine Ligase, Modifier Subunit; Glutamate--Cysteine Ligase Modifier Subunit; Gamma-Glutamylcysteine Synthetase; GSC Light Chain

Background

Gene Name: GCLM
NCBI Gene Entry: 2730

Storage

Store at liquid nitrogen for 1 year.

Kit Components

1. Human GCLM Knockdown Cell Line (Wb-Validated)
2. Wild-type cell line

Parental Cell Line

Human cell line supplied by the client

Validation Methods

RT-qPCR, Western blotting (WB)

Shipping

Shipped on Dry Ice.

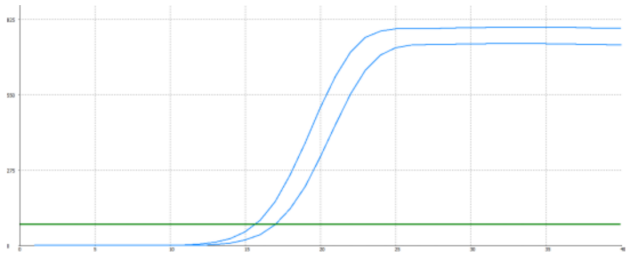
Instructions For Use

This knockdown cell line should be paired with wild-type cell line for use.

Note: This product is for research use only.

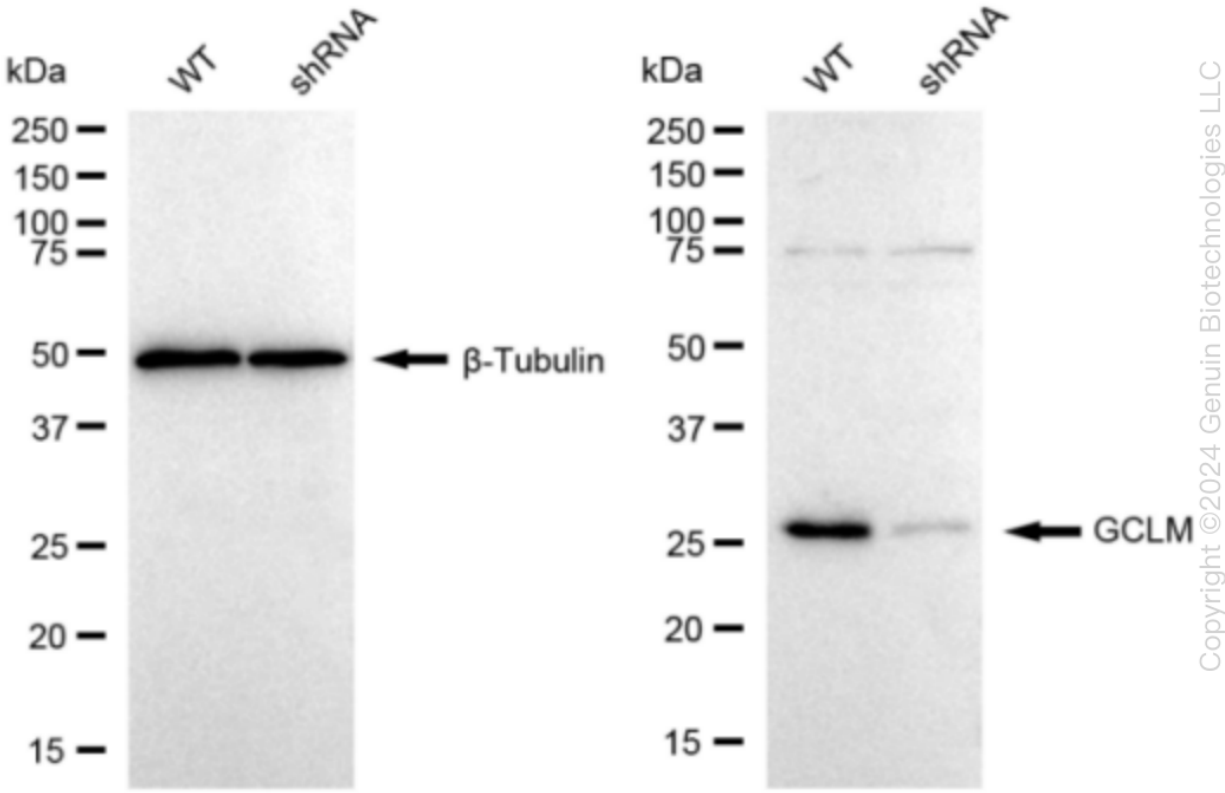
Validation Data

Human GCLM Knockdown Cell Line (WB-Validated)



Genotype	Ct Value
Wild-Type	15.14
Knock-Down	16.33
ΔCt (Ct_{KD}-Ct_{WT})	1.19
% mRNA Reduction	⬇ 56%

RT-qPCR analysis. HeLa cells were infected with GCLM-specific shRNA lentiviral particles, total RNA was extracted from wild-type and knockdown cells, RT-qPCR was performed using gene-specific primers. ΔCt (CtKD-CtWT) was used to calculate mRNA reduction (%) between wild-type and knockdown cells using the following formula: (1-1/2ΔCt) x 100%.



Western blotting analysis. GCLM protein expression in wild-type (WT) and shRNA knockdown (KD) HeLa cells was detected using Western blotting. β-Tubulin served as a loading control. The blots were incubated with primary antibodies (Cat#62007, 1:5,000) against GCLM and β-Tubulin, respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000). Images were developed using FeQ™ ECL Substrate Kit (Cat#226).