Human B2M Knockdown Cell Line (WB-Validated)



Catalog #: C62026

Aliases

B2M; Beta-2-Microglobulin; Beta Chain Of MHC Class I Molecules; Beta-2-Microglobin; IMD43

Background

Gene Name: B2M NCBI Gene Entry: 567

Storage

Store at liquid nitrogen for 1 year.

Kit Components

- 1. Human B2M 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.

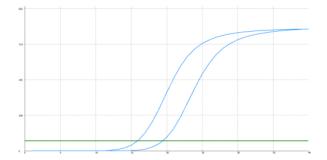
Instructions For Use

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

Note: This product is for research use only.

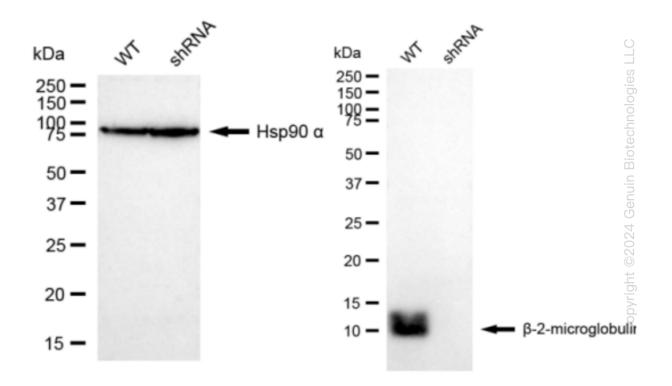
Validation Data

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Genotype	Ct Value
Wild-Type	15.62
Knock-Down	19.20
ΔCt (Ct_{KD} - Ct_{WT})	3.58
% mRNA Reduction	\$ 92%

RT-qPCR analysis. HeLa cells were infected with B2M-specific shRNA lentiviral particles, total RNA was extracted from wild-type and knockdown cells, RT-qPCR was performed using gene-specific primers. Δ Ct (CtKD-CtWT) was used to calculate mRNA reduction (%) between wild-type and knockdown cells using the following formula: $(1-1/2\Delta$ Ct) x 100%.



Western blotting analysis. B2M protein expression in wild-type (WT) and shRNA knockdown (KD) HeLa cells was detected using Western blotting. Hsp90 α served as a loading control. The blots were incubated with primary antibodies (Cat#62026, 1:5,000) against B2M and Hsp90 α , respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000). Images were developed using FeQTM ECL Substrate Kit (Cat#226).