Human SOD2 Knockdown Cell Line (WB-Validated)



Catalog #: C62706

Aliases

SOD2; Superoxide Dismutase 2; GClnc1; MnSOD; IPOB; GC1; Superoxide Dismutase [Mn], Mitochondrial; Superoxide Dismutase 2, Mitochondrial; EC 1.15.1.1; Epididymis Secretory Sperm Binding Protein; Manganese-Containing Superoxide Dismutase; Gastric Cancer—Associated LncRNA 1; Gastric Cancer-Associated LncRNA 1; Manganese Superoxide Dismutase; Mangano-Superoxide Dismutase; Mn Superoxide Dismutase; Indophenoloxidase B; Mn-SOD; IPO-B; MVCD6

Background

Gene Name: SOD2

NCBI Gene Entry: 6648

Storage

Store at liquid nitrogen for 1 year.

Kit Components

- 1. Human SOD2 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.

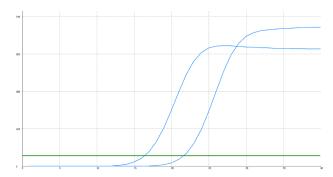
Instructions For Use

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

Note: This product is for research use only.

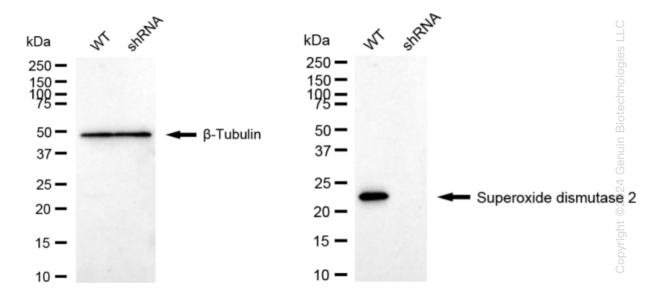
Validation Data

Human SOD2 Knockdown Cell Line (WB-Validated)



Genotype	Ct Value
Wild-Type	16.07
Knock-Down	21.50
$\Delta Ct (Ct_{KD}-Ct_{WT})$	5.43
% mRNA Reduction	↓ 98%

RT-qPCR analysis. HeLa cells were infected with SOD2-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. SOD2 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 against SOD2 and β -Tubulin, respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody. Images were developed using FeQTM ECL Substrate Kit.