WB-Validated SNX5 Lentiviral shRNA Knockdown Kit



Catalog #: V62718

Aliases

SNX5; Sorting Nexin 5; Sorting Nexin-5

Background

Gene Name: SNX5

NCBI Gene Entry: 27131

Storage

Store at -80 °C for one year.

Kit Components

- 1. WB-Validated SNX5 shRNA lentiviral particles (4 mL)
- 2. Non-Target shRNA lentiviral particles (4 mL)
- 3. Verification Tool: KD-Validated Anti-Sorting Nexin 5 Rabbit mAb #62718 (5 μL)

Tested Cell Line

HeLa

Validation Methods

RT-qPCR; Western Blotting (WB)

Shipping

Shipped with dry ice. Immediately store the product in a standard freezer at -80°C upon receipt.

Instructions For Use

The following protocol uses HeLa cell as an example assuming your cell culture medium is DMEM-based.

- 1.Release 0.5 million HeLa cells into a 35 mm tissue culture dish in 2 mL of the growth medium (DMEM containing 10% FBS and 1% pen/strep). Cell density should reach 50-60% confluence the following day.
- 2.24 h after cell release, pre-warm the shRNA lentiviral medium to 37°C.
- 3.Discard 1 mL of the original growth medium of the 35 mm dish.
- 4. Using a serological pipette, gently mix the lentiviral solution 3 times.
- 5.Carefully add 1 mL of the lentiviral solution to the well. Tip: To prevent splashing, add the solution to the dish along the wall.
- 6.Add a polybrene stock solution to the culture medium at a final concentration of 5 μg/mL.

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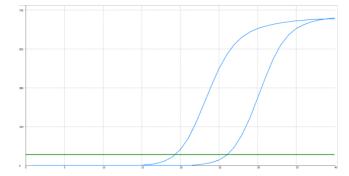
Gently swirl the dish to mix.

- 7.48 h after cell release, without discarding the original medium, add another 1 mL of lentiviral medium directly into the dish.
- 8.Add an additional polybrene stock solution into the dish to obtain a final concentration of 5 μ g/mL. Tip: Now, the medium in the dish should be a total of 3 mL.
- 9.72 h after cell release, cells may reach confluence. Trypsinize the cells off the 35 mm dish and culture those cells in a 60 mm dish.
- 10.Add puromycin to the dish at a final concentration of 4 μ g/mL. Tip: To assess the efficacy of puromycin selection, culture a dish of wild-type HeLa cells as a negative control.
- 11.Allow puromycin selection for 48 h. Almost all wild-type HeLa cells should die, while the dish infected with lentiviruses should have some remaining cells.
- 12.Replace the medium with regular growth medium without puromycin and allow the cells to grow to confluence before harvesting or staining.

Note: 1. This product is for research use only.

- 2. This product is only supplied to end users.
- 3. Do not use this product for commercial.

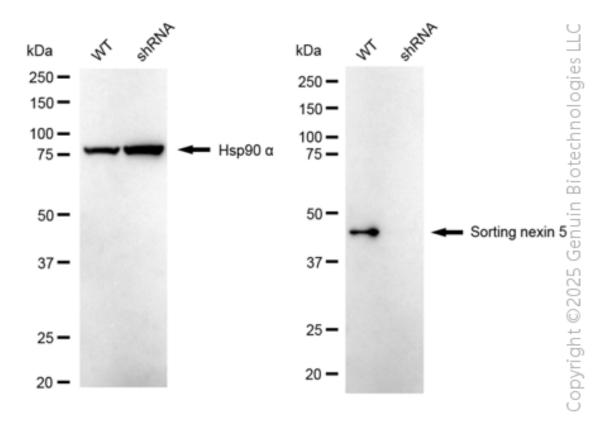
Validation Data



Genotype	Ct Value
Wild-Type	19.25
Knock-Down	26.03
∆Ct (CtKD-CtWT)	6.78
% mRNA	opyright
Reduction	99% 🖔

RT-qPCR analysis. HeLa cells were infected with SNX5-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%.

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Western blotting analysis. SNX5 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 against SNX5 and Hsp90 α , respectively, followed by incubating with HRP-conjugated goat anti-rabbit secondary antibody. Images were developed using FeQTM ECL Substrate Kit.