Human AAMP Knockdown Cell Line (WB-Validated)



Catalog #: C61156

Aliases

AAMP; Angio Associated MigRatory Cell Protein; Angio-Associated MigRatory Cell Protein

Background

Gene Name: AAMP NCBI Gene Entry: 14

Storage

Store at liquid nitrogen for 1 year.

Kit Components

- 1. Human AAMP 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.

Manufacturing Process

The following protocol was used to generate mRNA knockdown cells:

- 1.Release 0.5 million 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

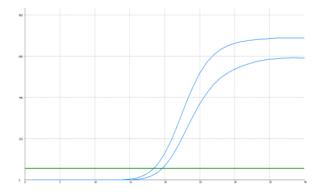
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solution to the dish along the wall.

- 6.Add a polybrene stock solution to the culture medium at a final concentration of 5 $\mu g/mL$. 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 cells as a negative control.
- 11.Allow puromycin selection for 48 h. Almost all wild-type cells should die, while the dish infected with lentiviruses should have some remaining cells.
- 849.Replace the medium with regular growth medium without puromycin and allow the cells to grow to confluence before harvesting or staining.

Note: This product is for research use only.

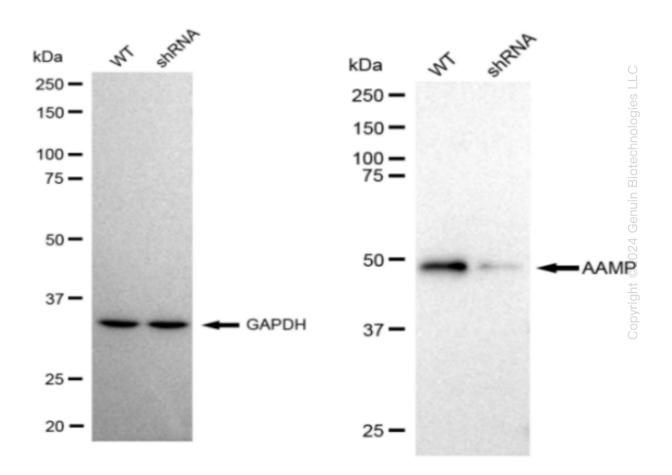
Validation Data



Genotype	Ct Value
Wild-Type	18.21
Knock-Down	19.18
$\Delta Ct (Ct_{KD}-Ct_{WT})$	0.97
% mRNA Reduction	↓ 49 %

RT-qPCR analysis. HeLa cells were infected with AAMP-specific shRNA lentiviral particles, total RNA was extracted from wild-type and knockdown cells, RT-qPCR was performed using genespecific 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. AAMP 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#69156, 1:5,000) against AAMP and β -Tubulin, 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).