

Human FOLR1-CHO-K1 Stable Cell Line

Catalog Number: C3038

DESCRIPTION

Cell Line Name Human FOLR1-CHO-K1 stable cell line (HuFOLR1-CHO-K1)

Catalog Number C3038
Gene Sequences P15328.3

Host Cell Adherent CHO-K1

 Quantity
 Two vials of frozen cells $(2x10^6 \text{ per vial})$

 Culture Medium
 DMEM with 10% FBS, 4µg/ml puromycin

Freezing Medium 90% FBS and 10% DMSO

Storage Liquid nitrogen

BACKGROUND

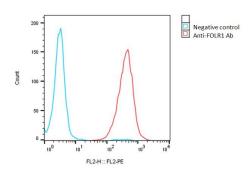
Folate receptor 1 (Folate receptor alpha, FOLR1) is a glycosyl-phosphatidylinositol (GPI)-linked membrane-bound protein, which exhibits a high affinity for folic acid and its reduced folic acid derivatives. FOLR1 mediates delivery of 5-methyltetrahydrofolate to the interior of cells. FOLR1 is involved in several cellular processes, including cell growth, survival, and signaling pathways. FOLR1 is expressed in kidney, placenta, serum, milk, and in several cell lines, while its expression has been found to be elevated in tumors of epithelial origin compared to normal tissue, including ovarian, breast, brain, lung and colorectal cancers. The tumor specificity of FOLR1 makes it a promising therapeutic target for the treatment of cancer.

THAWING AND CULTURING

- Remove the cell vial from liquid nitrogen tank and thaw cells quickly in a 37°C water bath
- Transfer the cells to a 15 ml centrifuge tube and slowly add 5 ml of pre-warmed complete growth medium
- Centrifuge the cells at 200x g for 5 min
- Remove the supernatant
- Resuspend cell pellet with 7 ml of complete growth medium and transfer cells to a T25 flask
- Incubate cells in an incubator with 5% CO₂ at 37°C
- Split the cells twice a week or as needed.

DATA

Detection of human FOLR1 expression on human FOLR1-CHO-K1 stable cells using a monoclonal antibody specific for human FOLR1 (BioLegend, Cat #908303)



REFERENCES

Zheng Y and Cantley LC. J Exp Med 216, 253-266. 2019.

Scaranti M, Cojocaru E, Banerjee S, Banerji U. Nature Reviews. Clinical Oncology. 17: 349-359.2020.

Shen J, Hu Y, Putt KS, Singhal S, Han H, Visscher DW, Murphy LM, Low PS. Oncotarget. 15:4485-4495. 2017.

Nawaz FZ, Kipreos ET. Trends Endocrinol Metab. Mar. 33:159-174. 2022.

Antony AC. Annu Rev Nutr. 16:501-21. 1996.