

MCF10A-PTENm-4 cell line

Catalogue number: 161207

Sub-type: Continuous

Images:

Contributor

Inventor: Medical-Industrial Translational Research Center

Institute: Fukushima Medical University

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: MCF10A-PTENm-4 cell line

Alternate name: 06M17007

Class:

Conjugate:

Description: Non-tumorigenic immortalized breast epithelial cell stably overexpressing mutant cancer-related gene, PTEN (phosphatase and tensin homolog). PTEN is a multi-functional tumor suppressor that is mutated and lost in a large number of cancers at high frequency. Observed in prostate cancer, glioblastoma, endometrial, lung and breast cancer to varying degrees. Up to 70% of prostate cancer patients have been observed to have loss of expression of the gene. It is a part of the PI3K/AKT/mTOR pathway and mTOR inhibitors have been relatively ineffective in treating patients with PTEN loss.

Purpose:

Parental cell: MCF10A, a non-tumorigenic cell line from human mammarygland epithelium

Organism: Human

Tissue: Mammarygland epithelium

Model: Mutant

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties: Adherent

Production details:

Formulation:
Recommended controls:
Bacterial resistance:
Selectable markers:
Additional notes:

Target details

Target: Phosphatase and tensin homolog [PTEN]

Target alternate names:

Target background: Gene ID: 5728; References: DNA (mRNA): NM_000314.6; Protein: NP_000305.3

Molecular weight:

Ic50:

Applications

Application: Functional analysis of mutated genes, Drug screening

Application notes:

Handling

Format: Frozen

Concentration:

Passage number:

Growth medium: DMEM/Ham's F-12 supplemented with 5% heat-inactivated horse serum, 10 μ g/ml insulin (human, recombinant), 5 μ M forskolin, 0.5 μ g/ml hydrocortisone, 20 ng/ml EGF (human, recombinant), 100 U/ml penicillin, and 100 μ g/ml streptomycin

Temperature: 37° C

Atmosphere: Humidified incubator with 5% CO_2

Volume:

Storage medium: CELLBANKER 2 (Zenogen pharma)

Storage buffer:

Storage conditions: Liquid Nitrogen

Shipping conditions: Dry ice

Related tools

Related tools:

References

References:

CancerTools.org