

MCF10A-EGFR1m-2 cell line

Catalogue number: 161169

Tool type:

Contributor

Inventor: Medical-Industrial Translational Research Center

Institute: Fukushima Medical University

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: MCF10A-EGFR1m-2 cell line

Alternate name: 06M01007

Class:

Conjugate:

Description: Non-tumorigenic immortalized breast epithelial cell stably overexpressing mutant cancer-related genes. EGFR (epidermal growth factor receptor). EGFR is a trans-membrane type receptor tyrosine kinase and signaling caused by EGFR is thought to play a crucial role in maintaining homeostasis of normal tissues by being involved in the regulation of cells such as proliferation and differentiation. Mutation of EGFR gene is found in lung cancer and it is known that its constant activation causes cell proliferation and tumorigenesis. Deletion of the Exon19 region, mutation of L858R and T790M are known as somatic cell mutations often found in cancer.

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:

Patient details

Cancer subtype:
Cancer stage/grade:
Biopsy site:
Patient ethnicity:
Treatment history:

Engraftment details

Mice passaged?:
Engraftment site:
Sample type:
Host strain:
Histology:
Genetic data:

Target details

Target: Epidermal growth factor receptor [EGFR]
Target alternate names:
Target background: Gene ID: 1956; References: DNA (mRNA): NM_005228.3; Protein: NP_005219.2
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 µg/ml streptomycin

Temperature: 37° C

Atmosphere: Humidified incubator with 5% CO₂

Volume:

Storage medium: CELLBANKER 2 (Zenogen pharma)

Storage buffer:

Storage conditions: Liquid Nitrogen

Shipping conditions: Dry ice

Related tools

Related tools:

References

References: Hoshi et al. Oncol Rep. 2017 Jan, 37(1):66-76. PMID: 27840974

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