# MCF10A-EGFR1m-5 cell line

Catalogue number: 161172

Sub-type: Continuous

Images:

#### Contributor

**Inventor:** Medical-Industrial Translational Research Center

**Institute:** Fukushima Medical University

Images:

#### **Tool details**

#### \*FOR RESEARCH USE ONLY

Cancer Tools.org Name: MCF10A-EGFR1m-5 cell line

Alternate name: 06M01010

Class: Conjugate:

**Description:** Non-tumorigenic immortalized breast epithelial cell stably overexpressing mutant cancerrelated 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:

## **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 Cancer

**Application notes:** 

## Handling

Format: Frozen **Concentration:** Passage number:

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

recombinant), 100 U/ml penicillin, and 100 Â?g/ml streptomycin

Temperature: 37° C

Atmosphere: Humidified incubator with 5%Â 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: 27840977

