

# MCF10A-EGFR1m-21 cell line

**Catalogue number:** 161188

**Sub-type:** Continuous

**Images:**

## Contributor

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

**Institute:** Fukushima Medical University

**Images:**

## Tool details

**\*FOR RESEARCH USE ONLY**

**Name:** MCF10A-EGFR1m-21 cell line

**Alternate name:** 06M01043

**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:**

## 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  $\mu$ g/ml insulin (human, recombinant), 5  $\mu$ M forskolin, 0.5  $\mu$ g/ml hydrocortisone, 20 ng/ml EGF (human, recombinant), 100 U/ml penicillin, and 100  $\mu$ g/ml streptomycin

**Temperature:** 37° C

**Atmosphere:** Humidified incubator with 5%  $\text{CO}_2$

**Volume:**

**Storage medium:** CELLBANKER 2 (Zenogen pharma)

**Storage buffer:**

**Storage conditions:** Liquid Nitrogen

**Shipping conditions:** Dry ice

## Related tools

**Related tools:**

## References

**References:** Hoshi et al. Oncol Rep.Â 2017 Jan, 37(1):66-76. PMID: 27840993

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