# MCF10A-ERRB2m-3 cell line

Catalogue number: 161192

Sub-type: Continuous

Images:

#### Contributor

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

**Institute:** Fukushima Medical University

Images:

### **Tool details**

#### \*FOR RESEARCH USE ONLY

Name: MCF10A-ERRB2m-3 cell line

Alternate name: 06M15003

Class: Conjugate:

Cancer Tools.org Description: Non-tumorigenic immortalized breast epithelial cell stably overexpressing mutant cancerrelated gene, ERBB2 (erb-B2 Receptor Tyrosine Kinase 2). ERBB2 is a member of the epidermal growth factor (EGF) receptor family of receptor tyrosine kinases. This protein bind tightly to other ligand-bound EGF receptor family members to form a heterodimer, stabilizing ligand binding and enhancing kinase-mediated activation of downstream signalling pathways. Allelic variations at amino acid positions 654 and 655 of isoform a (positions 624 and 625 of isoform b) have been reported, with the most common allele, Ile654/Ile655. Amplification and/or overexpression of this gene has been reported in numerous cancers, including breast and ovarian tumors.

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:** Erb-b2 receptor tyrosine kinase 2 [ERBB2]

Target alternate names:

Target background: Gene ID: 2064; References: DNA (mRNA): NM\_004448.3; Protein: NP\_004439.2

ools.org

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 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: Irie et al. Mol Cancer Ther. 2019 Apr, 18(4):733-742. PMID: 30787176

