

MCF7/TAMR-8 Cell Line

Catalogue number: 152086

Sub-type: Continuous

Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: MCF7/TAMR-8 Cell Line

Alternate name: MCF-7/TAMR-8; TAMR-8

Class:

Conjugate:

Description: MCF7/TAMR-8 cell line is a stable tamoxifen-resistant subline. This cell line has been established in tissue culture after long term treatment with 1 uM tamoxifen. Tamoxifen (Nolvadex) is a widely used drug for hormone-dependent cancer. Tamoxifen resistance (either primary or acquired) makes oestrogen receptor-positive breast cancer much more difficult to treat. This cell line was produced from the parental cell line MCF7/S0.5, as a model cell system to study the effects of tamoxifen resistant cancer growth. Tamoxifen-resistant cells are passaged continuously in the presence of 1 uM tamoxifen. This concentration is lethal for the parental cell line. MCF7/TAMR-8 cells are oestrogen receptor positive and progesterone receptor negative. Previous applications of this cell line include treatment with steroidal antioestrogens. MCF7/TAMR-8 enables identification of new hormone therapies and greater understanding of the signalling pathways/methods behind tamoxifen resistance. Additionally MCF/TAMR-8 can aid in identifying new predictive markers for response to hormonal therapy.

Purpose:

Parental cell: MCF7 S0.5

Organism: Human

Tissue: Breast

Model: Tumour line

Gender: Female

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details: The parental cell line for the MCF7/TAMR-8 cells is MCF7/S0.5, which was adapted to grow at low serum concentration in order to study the effect of estradiol and tamoxifen. MCF7/TAMR-8 has been established from a clone of cells that survived long term treatment with 1 uM tamoxifen. Tamoxifen-resistant cells are passaged continuously in presence of 1 uM tamoxifen, which is lethal for the parental MCF7/S0.5 cell line.

Formulation:

Recommended controls: MCF7-S0.5 parental line

Bacterial resistance:

Selectable markers:

Additional notes: MCF7/TAMR-8 cells are oestrogen receptor positive and progesterone receptor negative. MCF7/TAMR-8 cells are growth inhibited by the pure antioestrogen fulvestrant. The oestrogen receptor is a major driver of growth of MCF7/TAMR-8 cell.

Target details

Target: Oestrogen receptor

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application: Investigate signalling pathways involved in tamoxifen

Application notes: MCF7/TAMR-8 cells are oestrogen receptor positive and progesterone receptor negative. MCF7/TAMR-8 cells are growth inhibited by the pure antioestrogen fulvestrant. The oestrogen receptor is a major driver of growth of MCF7/TAMR-8 cell. Passage 398 (AL2687, AL2688)

Handling

Format: Frozen

Concentration:

Passage number: Passage 398 (AL2687, AL2688)

Growth medium: Phenol red-free DMEM:Ham's F-12 containing 1% fetal bovine serum, 2 mM Glutamax and 6 ng/ml insulin. To maintain high-level resistance, medium was supplemented with Tamoxifen (1 uM).

Temperature:

37° C

Atmosphere: 5% CO2

Volume:

Storage medium:

Storage buffer:

Storage conditions: Liquid Nitrogen

Shipping conditions: Dry ice

Related tools

Related tools: MCF7/S0.5 Cell Line

References

References:

CancerTools.org