

MCF7A AKT1 [MCF7-AKT1] cell line

Catalogue number: 154636

Sub-type: Continuous

Images:

Contributor

Inventor: Lambert Dorssers

Institute: Erasmus University Medical Center (Erasmus MC)

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: MCF7A AKT1 [MCF7-AKT1] cell line

Alternate name: AKT Serine/Threonine Kinase 1; Protein Kinase B; PKB; RAC

Class:

Conjugate:

Description: Breast cancer is widely and effectively treated with endocrine treatment. However, in many disease cases the tumours will eventually progress into an estrogen-independent and therapy-resistant phenotype. Seven genes including AKT1, AKT2, BCAR1, BCAR2, BCAR3, EGFR2 and GRB7 have been shown to directly underlie estrogen independence in MCF7A human breast cancer cells. This cell line is part of a panel of 4 cell lines (Cat No 154636-154638, 154643) which have been transfected with these genes, plus the parental (Cat No 154546). These cell lines are a powerful tool for studying the molecular and cellular mechanisms of breast tumour progression, therapy resistance and to test the effectiveness of novel drugs to combat different modes of anti-estrogen insensitivity.

Purpose:

Parental cell: MCF7A

Organism: Human

Tissue: Breast

Model: Cancer Model

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details: Full length AKT1 cDNA was introduced in the estrogen-dependent MCF7A cell line by transfection with lipofectamine

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: AKT1

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application:

Application notes: This cell line is also resistant to Geneticin which may be included in the culture to maintain the expression plasmid

Handling

Format: Frozen

Concentration:

Passage number:

Growth medium: RPMI 1640 medium supplemented with 10% heat-inactivated fetal calf serum (FCS)

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer:

Storage conditions: Liquid Nitrogen

Shipping conditions: Dry ice

Related tools

Related tools:

References

References: van Agthoven et al. 2010. Endocr Relat Cancer. 17(1):215-30. PMID: 19966015.

CancerTools.org