

ZR-75-1 AKT1 [ZR-AKT1 pool B] cell line

Catalogue number: 154623

Sub-type: Continuous

Images:

Contributor

Inventor: Lambert Dorssers

Institute: Erasmus University Medical Center (Erasmus MC)

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: ZR-75-1 AKT1 [ZR-AKT1 pool B] 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 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 human breast cancer cells. This cell line is part of a panel of 16 cell lines (Cat No 154621-154635, 154642) which have been transfected with these genes, plus the parental (Cat No 154547). This cell line is 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: ZR-75-1

Organism: Human

Tissue: Breast

Model: Cancer Model

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details: Expression constructs with AKT1 were transfected into ZR-75-1 cells using FuGENE 6 and selected with G418. After selection for G418 resistance colonies were pooled and expanded

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: The cell line is resistant to Geneticin, which may be included in the culture medium to ensure that the expression vector is retained by the cells.

Handling

Format: Frozen

Concentration:

Passage number:

Growth medium: RPMI 1640 medium supplemented with 10% heat-inactivated bovine serum (RBCS) and 1 nM 17 β -estradiol

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. 1998. EMBO J. 17(10):2799-808. PMID: 9582273.

CancerTools.org