

ZR-75-1 BCAR4 [ZR-BCAR4 2B] cell line

Catalogue number: 154626

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 BCAR4 [ZR-BCAR4 2B] cell line

Alternate name: Breast Cancer Anti-Estrogen Resistance 4

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: Retroviral particles containing BCAR4 cDNA were produced by transient transfection of Phoenix-Ampho packaging cells using FuGENE6. ZR-75-1 cells were incubated with viral particles in the presence of 4ug/ml polybrene and 1nmol/L estradiol. Three days after transfection cells were cultured in medium supplemented with G418 and resistant colonies were expanded.

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: BCAR4

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. As a consequence of the presence of a BCAR genes, these cells can also proliferate in the absence of estrogen or even in the presence of anti-estrogens.

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: Godinho et al. 2011. J Cell Physiol. 226(7):1741-9. PMID: 21506106. ; Meijer et al. 2006. Mol Cancer Res. 4(6):379-86. PMID: 16778085.