

# ZH3D7:BCAR1 [D4E5] Fusion cell line

**Catalogue number:** 154639

**Sub-type:** Continuous

**Images:**

## Contributor

**Inventor:** Lambert Dorssers

**Institute:** Erasmus University Medical Center (Erasmus MC)

**Images:**

## Tool details

**\*FOR RESEARCH USE ONLY**

**Name:** ZH3D7:BCAR1 [D4E5] Fusion cell line

**Alternate name:** Breast Cancer Anti-Estrogen Resistance 1; CASS1; P13Cas; CRKAS

**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. Somatic cell fusion was used to generate this cell line in order to elucidate the molecular mechanisms underlying endocrine therapy failure. Using this method revealed that tamoxifen resistance co-segregated with only 1 or 2 of the integration loci present in the tamoxifen-resistant donor cell line, designated the first breast cancer anti-estrogen resistance locus (BCAR1). This cell line is part of a panel of 3 somatic hybrids (Cat No 154639-154641) plus the parental (Cat 154620). This cell line is a powerful tool for studying the molecular and cellular mechanisms of breast tumour progression and therapy resistance.

**Purpose:**

**Parental cell:** ZH3D7

**Organism:** Human

**Tissue:** Breast

**Model:** Cancer Model

**Gender:**

**Isotype:**

**Reactivity:**

**Selectivity:**

**Host:**

**Immunogen:**

**Immunogen UNIPROT ID:**

**Sequence:**

**Growth properties:**

**Production details:** Hygromycin-B-resistant variants of ZR-75-1 cells, ZH3D7, were used as recipients in the somatic-cell-fusion experiments. Donor cells were the anti-estrogen-resistant cell line XI-13. Approximately 6 million donor cells, which were gamma-irradiated with approx 40 Gy and 3 million recipient cells were plated in 25cm flasks in RBCS medium with estradiol. After strong adherence to the flasks in 36 to 48 hr, cells were washed 3 times in RPMI-1640 without serum and incubated with 1 ml polyethylene ...

**Formulation:****Recommended controls:****Bacterial resistance:****Selectable markers:****Additional notes:**

## Target details

**Target:** BCAR1

**Target alternate names:**

**Target background:**

**Molecular weight:**

**Ic50:**

## Applications

**Application:**

**Application notes:** This cell line is resistant to hygromycin and Gentamicin and are maintained in RBCS medium with estradiol and Geneticin. Since they carry a BCAR gene, that can also proliferate slowly in medium without estradiol and supplemented with anti-estrogen.

## Handling

**Format:** Frozen

**Concentration:**

**Passage number:**

**Growth medium:** R/BCS medium containing estradiol and Geneticin (G418)

**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.

CancerTools.org