

# ZR-75-1 HRAS [ZR-HRAS pool A] cell line

**Catalogue number:** 154630

**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 HRAS [ZR-HRAS pool A] cell line

**Alternate name:** HRas Proto-Oncogene, GTPase; Transforming Protein P21

**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 HRAS 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 containing 1umol/L 4-hydroxytamoxifen. 4-hydroxytamoxifen resistant colonies were pooled and expanded.

**Formulation:**

**Recommended controls:**

**Bacterial resistance:**

**Selectable markers:**

**Additional notes:**

## Target details

**Target:** HRAS

**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 $\beta$ -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. 1992. Cancer Res. 52(18):5082-8. PMID: 1516065.

CancerTools.org