MCF7 AREc32 Cell Line

Catalogue number: 151014 Sub-type: Continuous Images:

Contributor

Inventor: Roland Wolf Institute: University of Dundee Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: MCF7 AREc32 Cell Line

Alternate name:

Class:

Conjugate:

Cancer Tools.org Description: Cell line used to investigate ARE gene expression. Background and Research ApplicationThe stable human mammary MCF7-derived reporter cell line called AREc32 contains copies of the rat GST antioxidant response element (ARE) linked to a luciferase gene, such that the induction of the ARE results in luciferase activity. ARE is a transcriptional cis-regulatory element involved in the activation of genes coding for a number of antioxidant proteins and enzymes that work in concert to protect tissues from oxidative insults. This cell line can be used to investigate whether anticancer drugs can induce ARE-driven gene expression.

Purpose:

Parental cell: MCF7 **Organism:** Human Tissue: Breast Model: Reporter Gender: Isotype: **Reactivity:** Selectivity: Host: Immunogen: Immunogen UNIPROT ID: Sequence: Growth properties: Production details:

The ARE-luciferase reporter plasmid was generated using the pGL3-promoter vector containing an SV40 promoter upstream of the firefly luciferase gene. They differ in the number of copies of ARE sequences that have been inserted, in head-to-tail orientation, through Nhe I & Xho I restrictionsites upstream of the promoter-luc+ transcriptional unit. A plasmid was made containing eight copies of the ARE (5'-GTGACAAAGCA-3', with the minimal functional sequence underlined) present in both rat GSTA2

Formulation: **Recommended controls:** MCF7 parental line **Bacterial resistance:** Selectable markers: Additional notes:

Target details

Target: Antioxidant Response Element (ARE)- Luciferase

Target alternate names: CancerTools.org

Target background:

Molecular weight:

Ic50:

Applications

Application: Application notes:

Handling

Format: Frozen **Concentration:** Passage number: Growth medium: DMEM with glutamax supplemented with 10% fetal bovine serum and antibiotics. Do not culture beyond 15 passages after revival. **Temperature:** Atmosphere: Volume: Storage medium: Storage buffer: Storage conditions: Liquid Nitrogen Shipping conditions: Dry ice

Related tools

Related tools:

References

References:

