A2780ADR Cell Line

Catalogue number: 152707
Sub-type: Continuous
Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: A2780ADR Cell Line

Alternate name:

Class:
Conjugate:
Description: The adriamycin-resistant cell line A2780ADR has been developed by exposure of the parent A2780 cell line (catalogue no. 152706) to adriamycin. A2780ADR is cross-resistant to melphalan and vinblastine. To retain resistance adriamycin has to be added to the media. The cells grow as a monolayer and in suspension in spinner cultures and are tumourigenic in immune deficient mice. Together with the cisplatin-resistant variant A2780cis (catalogue no. 152708_ these lines only differ in their exposure to a single drug and should facilitate the search for molecular changes responsible for the expression of pleiotropic drug resistance in human ovarian cancer.
Purpose:
Parental cell: A2780
Organism: Human
Tissue: Ovary
Model: Tumour line
Gender:
Isotype:
Reactivity:
Selectivity:
Host:
Immunogen:
Immunogen UNIPROT ID:
Sequence:
Growth properties: Adherent
Production details:

Split sub-confluent cultures (70-80%) 1:5 to 1:10 i.e. seeding at 5x1,000 to 2x10,000 cells/cmÄ?Â???Â? using 0.25% trypsin or trypsin/EDTA; 5% CO2; 37Ä?Â???Â°C. Recommendation: culture cells without drug after resuscitation until growth has been fully established.
Formulation:
Recommended controls:
Bacterial resistance:
Selectable markers:
Additional notes: STR-PCR Data: Amelogenin: X CSF1PO: 10,11 D13S317: 13 D16S539: 11,14 D5S818: 11,12 D7S820: 10 THO1: 6 TPOX: 8,9 vWA: 15,16

Target details

Target: Adriamycin resistance

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application:
Application notes: STR-PCR Data: Amelogenin: X CSF1PO: 10,11 D13S317: 13 D16S539: 11,14 D5S818: 11,12 D7S820: 10 THO1: 6 TPOX: 8,9 vWA: 15,16

Handling

Format: Frozen
Concentration:
Passage number:
Growth medium: RPMI 1640 + 2mM Glutamine + 10% Foetal Bovine Serum (FBS); treatment with 10E-7 M adriamycin at least once a week.
Temperature:
Atmosphere:
Volume:
Storage medium:
Storage buffer:
Storage conditions:
Shipping conditions: Dry ice

Related tools

Related tools: A2780 Cell Line ; A2780cis Cell Line

References

References: Nusinow et al. 2020. Cell. 180(2):387-402.e16. PMID: 31978347. ; Ghandi et al. 2019. Nature. 569(7757):503-508. PMID: 31068700. ; Dutil et al. 2019. Cancer Res. 79(7):1263-1273. PMID: 30894373. ; Zhao et al. 2017. Clin Proteomics. 14:20. PMID: 28546799. ; Medrano et al. 2017. Cell Rep. 18(10):2343-2358. PMID: 28273451. ; Extracellular matrix proteins expression profiling in chemoresistant variants of the A2780 ovarian cancer cell line. ; Januchowski et al. 2014. Biomed Res Int. 2014:365867. PMID: 24804215. ; Han et al. 2013. Oncol Lett. 6(5):1295-1298. PMID: 24179511. ; A2780 human ovarian cancer cells with acquired paclitaxel resistance display cancer stem cell properties. ; Barretina et al. 2012. Nature. 483(7391):603-7. PMID: 22460905. ; The Cancer Cell Line Encyclopedia enables predictive modelling of anticancer drug sensitivity. ; Yu et al. 2000. Int J Oncol. 16(3):555-60. PMID: 10675489. ; Comparison of two human ovarian carcinoma cell lines (A2780/CP70 and MCAS) that are equally resistant to platinum, but differ at codon 118 of the ERCC1 gene. ; Henkels et al. 1997. Cancer Res. 57(20):4488-92. PMID: 9377558. ; Induction of apoptosis in cisplatin-sensitive and -resistant human ovarian cancer cell lines. ; Parker et al. 1991. J Clin Invest. 87(3):772-7. PMID: 1999494. ; Acquired cisplatin resistance in human ovarian cancer cells is associated with enhanced repair of cisplatin-DNA lesions and reduced drug accumulation.