

Product description

Tumorigenic epithelial ovarian cancer cell line derived from malignant ascites of a patient never exposed to chemotherapy or radiation therapy. Cell line retains characteristics of the original epithelial ovarian cancers from which it was derived.

Name: OV-90 cell line

Disease: Cancer

Cancer: Ovarian cancer

Cancer detailed: Adenocarcinoma

Organism: Human

Gender: Female

Tissue: Ovary

Donor: 64-year-old chemo naive female, Grade 3, stage IIIC.

Mutations: TP53 Exon 6, CDKN2A exon 2

Karyotype: 46, XX, der(1)t(1;10)(p36;p15), hsr(3)(p11), der(9;17)(q10;q10), der(10)t(10;17)(p15;p12p13), der(13)t(13;13)(p11;q14)

Tumorigenic: Yes

Growth properties: Adherent

CRISPR Edited: No

Contributor(s)

Inventor(s): Anne-Marie Mes-Masson and Diane Provencher

Institute: Centre Hospitalier de L'université de Montréal

Properties

Product format: Frozen

Unpacking and storage:

1. Check all containers for leakage or breakage.
2. Remove the frozen cells from the dry ice packaging and immediately place the cells at a temperature below -130°C, preferably in liquid nitrogen vapor, until ready for use.

Recommended medium: OSE medium (Wisent® No. 316-030-CL) with 10% FBS, 0.5ug/mL amphotericin B and 50 ug/mL gentamicin.

Subculture: Split confluent cultures 1:3, using 0.25% trypsin or trypsin/EDTA; 5% CO₂; 37°C, every 3 days.

- **Cryopreservation:** Freeze in 90% FBS and 10% DMSO at a density of 2-3 million cells/mL at a controlled freezing rate of -1°C per minute.

Culture conditions: 37.0°C ± 1.0°C incubator with 5.0% ± 1.0% CO₂

Handling instructions

1. Please ensure that vials are frozen when received, and store at **<-130 °C long term**. When removing frozen cells from storage, it is important to minimize exposure to room temperature (15 - 25°C). If not proceeding directly to thawing, place the cells on dry ice or in a liquid nitrogen container.
2. **Do not thaw at room temperature.** To thaw, swirl the vial quickly in a 37 °C water bath with O-ring and cap above the water to avoid contamination. Remove from the water bath with a small ice pellet remaining (this should not take more than 2 minutes) and wipe the exterior with 70% ethanol or isopropanol before transferring to a biosafety cabinet. Further steps should be conducted under aseptic conditions.
4. Immediately transfer the thawed cell suspension to a 100 mm culture dish containing 7 mL of media. Allow the cells to settle overnight and replace the culture medium the next morning. Incubate until >80% confluent.

Important notes:

- It is normal to see black granules in the culture medium. The cells are not affected by the appearance of these artefacts.

References

- Raspaglio et al. 2023. Cancers (Basel). 18;15(8):2361. PMID: 37190289
- Yee et al. 2022. Front Bioeng Biotechnol. 10;10:836984. PMID: 35223797
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- Buttarelli et al. 2022. J Exp Clin Cancer Res. 4;41(1):50. PMID: 35120576
- Provencher et al. 2000. In Vitro Cell Dev Biol Anim. (36): 357–361. PMID:10949993

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: OV-90 cell line, was invented by Anne-Marie Mes-Masson and Diane Provencher (CancerTools.org #161765).

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