

SKOV- 3/Luc Cell Line

CATALOG NUMBER: AKR-232

STORAGE: Liquid nitrogen

Note: For best results begin culture of cells immediately upon receipt. If this is not possible, store at -80°C until first culture. Store subsequent cultured cells long term in liquid nitrogen.

QUANTITY & CONCENTRATION: 1 mL, 1×10^6 cells/mL in 70% DMEM, 20% FBS, 10% DMSO

Background

The human ovary cancer cell line SKOV-3 was derived from the ascitic fluid of a 64 year old Caucasian female with an ovarian tumor in 1973. SK-OV-3 cells are resistant to tumor necrosis factor and to several cytotoxic drugs including diphtheria toxin, cis- platinum and adriamycin. With epithelial-like morphology, SKOV-3 has abundant activity in both the Boyden chamber chemotaxis and invasion assay. The SKOV-3 cell line is also able to grow in soft agar, an indicator of transformation and tumorigenicity, and displays a relatively high colony forming efficiency. *In vivo*, SKOV-3 cells can form moderately well-differentiated adenocarcinoma consistent with ovarian primary cells. Our SKOV-3/Luc cell line stably expresses firefly luciferase gene and Neomycin resistant gene.

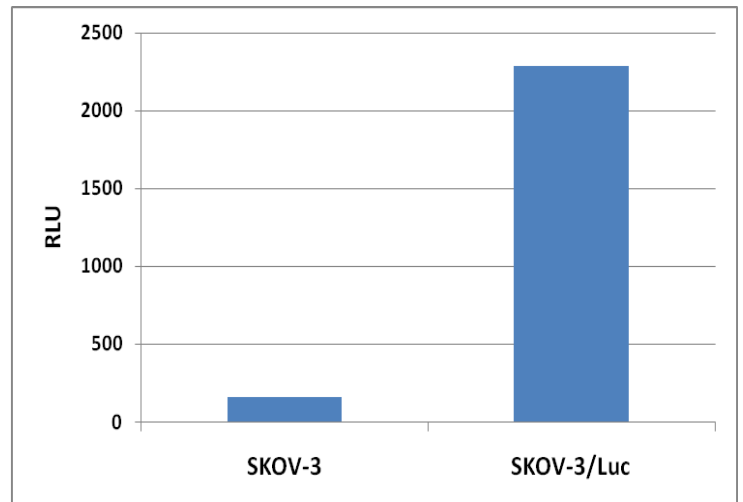
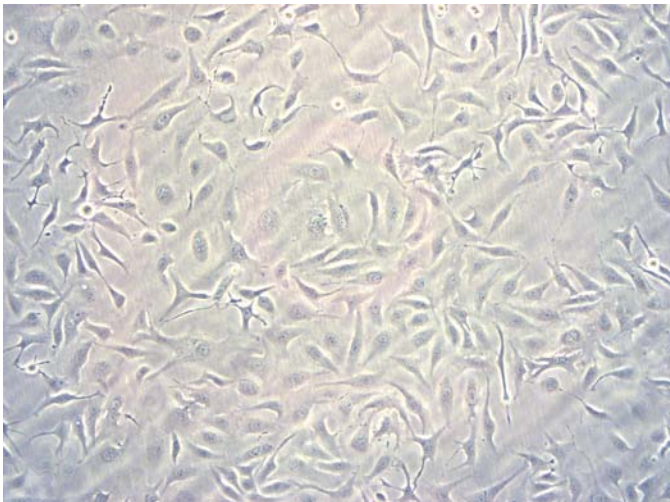


Figure 1. SKOV-3/Luc Cell Line. Left: Phase Contrast; Right: Luciferase Activity Assay.

Quality Control

This cryovial contains at least 1.0×10^6 SKOV-3/Luc cells as determined by morphology, trypan-blue dye exclusion, and viable cell count. The SKOV-3/Luc cells are tested free of microbial contamination.

Medium

1. Culture Medium: D-MEM (high glucose) or McCoy's 5A, 10% fetal bovine serum (FBS), 0.1 mM MEM Non-Essential Amino Acids (NEAA), 2 mM L-glutamine, 1% Pen-Strep.
2. Freeze Medium: 70% DMEM or McCoy's 5A, 20% FBS, 10% DMSO.

Methods

Establishing SKOV-3/Luc Cultures from Frozen Cells

1. Place 10 mL of complete DMEM growth medium in a 50-mL conical tube. Thaw the frozen cryovial of cells within 1–2 minutes by gentle agitation in a 37°C water bath. Decontaminate the cryovial by wiping the surface of the vial with 70% (v/v) ethanol.
2. Transfer the thawed cell suspension to the conical tube containing 10 ml of growth medium.
3. Collect the cells by centrifugation at 1000 rpm for 5 minutes at room temperature. Remove the growth medium by aspiration.
4. Resuspend the cells in the conical tube in 15 mL of fresh growth medium by gently pipetting up and down.
5. Transfer the 15 mL of cell suspension to a T-75 tissue culture flask. Place the cells in a 37°C incubator at 5% CO₂.
6. Monitor cell density daily. Cells should be passaged when the culture reaches 95% confluence.

Recent Product Citations

1. Tekabe, Y. et al. (2016). Targeting RAGE expression in human ovarian cancer. *Clin. Oncol.* **1**:1055.
2. Tung, C. H. et al. (2015). A quick responsive fluorogenic pH probe for ovarian tumor imaging. *Theranostics.* **5**:1166-1174.
3. Zheng, J. et al. (2015). A multimodal nano agent for image-guided cancer surgery. *Biomaterials.* **67**:160-168.
4. Pham, E. et al. (2015). Translational impact of nanoparticle-drug conjugate CRLX101 with or without bevacizumab in advanced ovarian cancer. *Clin Cancer Res.* **21**:808-818.
5. Lungchukiet, P. et al. (2014). Suppression of epithelial ovarian cancer invasion into the omentum by 1 α , 25-dihydroxyvitamin D 3 and its receptor. *J Steroid Biochem Mol Biol.* **148**:138-147.
6. Batchu, R. B. et al. (2014). Efficient lysis of epithelial ovarian cancer cells by MAGE-A3-induced cytotoxic T lymphocytes using rAAV-6 capsid mutant vector. *Vaccine.* **32**:938-943.

Warranty

These products are warranted to perform as described in their labeling and in Cell Biolabs literature when used in accordance with their instructions. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THIS EXPRESSED WARRANTY AND CELL BIOLABS DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR PARTICULAR PURPOSE. CELL BIOLABS's sole obligation and purchaser's exclusive remedy for breach of this warranty shall be, at the option of CELL BIOLABS, to repair or replace the products. In no event shall CELL BIOLABS be liable for any proximate, incidental or consequential damages in connection with the products.

This product is for RESEARCH USE ONLY; not for use in diagnostic procedures.

Contact Information

Cell Biolabs, Inc.
7758 Arjons Drive
San Diego, CA 92126
Worldwide: +1 858-271-6500
USA Toll-Free: 1-888-CBL-0505
E-mail: tech@cellbiolabs.com
www.cellbiolabs.com

©2010-2016: Cell Biolabs, Inc. - All rights reserved. No part of these works may be reproduced in any form without permissions in writing.