Cell Line Designation: OE-33 cells

AddexBio Catalog No. C0013003

Cell Line Description:

Origin: Established from the adenocarcinoma of the lower oesophagus (Barrett's metaplasia), equivalent to JROECL33.

Species: Homo sapiens

Tissue: Esophagus

Properties: Adherent; epithelial

Cytogenic data: Express HLA-A, -B and -C antigens (MHC class I) and ICAM-1 constitutively. Expression of HLA-DR (MHC class II) can be induced by treatment with interferon-gamma. The cells express epithelial cytokeratins and are tumourigenic in nude mice.

Patient: Female, Caucasian, 73 years of age

Complete Medium: AddexBio-formulated RPMI-1640 Medium (C0004-01) + 10% FBS

Subculture Procedure: 1:3 to 1:5 using 0.25% trypsin or trypsin/EDTA, 5% CO2; 37°C

Medium Renewal: Two to three times weekly.

Freezing Medium: Complete culture medium supplemented with 5% (v/v) DMSO

Additional Information: Additional product and technical information can be obtained from the catalog references and the Addexbio Technical Information site at www.addexbio.com, or by email at customersupport@addexbio.com.

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. laboratory safety is discussed in the following publication: Biosafety in Microbiological and Biomedical Laboratories, 5th ed. HHS Publication No. (CDC) 93-8395. U.S. Department of Health and

Human Services, Centers for Disease Control and Prevention. Washington DC: U.S. Government Printing Office; 2007. The entire text is also available online at www.cdc.gov/od/ohs/biosafty/bmbl4/bmbl4toc.htm

Use Restrictions:

These cells are distributed for research purposes only. Addexbio does not recommend third party distribution of this cell line, as this practice has resulted in the unintentional spreading of contaminated cell lines.

Handling Procedure for Frozen Cells:

To insure the highest level of viability, thaw the vial and initiate the culture as soon as possible upon receipt. If upon arrival, continued storage of the frozen culture is necessary, it should be stored in liquid nitrogen vapor phase and not at -70°C. Storage at -70°C will result in loss of viability.

Safety Precaution:

Addexbio highly recommends that protective gloves and clothing always be used and a full face mask always be worn when handling frozen vials. It is important to note that some vials leak when submersed in liquid nitrogen and will slowly fill with liquid nitrogen. Upon thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vessel exploding or blowing off its cap with dangerous force creating flying debris.

1. Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the O-ring and cap out of water. Thawing should be rapid (approximately 2 minutes).

2. Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by dipping in or spraying with 70% ethanol. All of the operations from this point on should be carried out under strict aseptic conditions.

3. Transfer the vial contents to the centrifuge tube containing 9.0 mL complete culture medium and spin at approximately 125xg for 5 to 7 minutes. (Optional if one wants to remove DMSO)

4. Resuspend cell pellet with the recommended complete medium and dispense into a new culture flask. It is important to avoid excessive alkalinity of the medium during recovery of the cells. It is suggested that, prior to the addition of the vial contents, the culture vessel containing the complete growth medium be placed into the incubator for at least 15 minutes to allow the medium to reach its normal pH (7.0-7.6).

5. One may also transfer the vial contents into a new culture flask if removal of DMSO is not important. It is suggested that, prior to the addition of the vial contents, the culture vessel containing the complete growth medium be placed into the incubator for at least 15 minutes to allow the medium to reach its normal pH (7.0-7.6).

6. Incubate the culture at 37°C in a suitable incubator for 24-48 hours for cell attachment. A 5% CO_2 in air atmosphere is recommended.

References for OE-33 cells:

1. Zhang, Q., Zhao, X. H., and Wang, Z. J. Flavones and flavonols exert cytotoxic effects on a human oesophageal adenocarcinoma cell line (OE33) by causing G2/M arrest and inducing apoptosis. Food Chem Toxicol, 46: 2042-2053, 2008.

2. Beales, I. L. and Ogunwobi, O. O. Leptin synergistically enhances the anti-apoptotic and growth-promoting effects of acid in OE33 oesophageal adenocarcinoma cells in culture. Mol Cell Endocrinol, 274: 60-68, 2007.

3. Cheong, E., Ivory, K., Doleman, J., Parker, M. L., Rhodes, M., and Johnson, I. T. Synthetic and naturally occurring COX-2 inhibitors suppress proliferation in a human oesophageal adenocarcinoma cell line (OE33) by inducing apoptosis and cell cycle arrest. Carcinogenesis, 25: 1945-1952, 2004.

Lot Specific Information Sheet for AddexBio Cat #: C0013003

Lot Number: 0003752

Designation: OE-33 CELLS

Total Cells/mL: >$2x10^6$

Expected Viability: 70.0-75.1%

Ampule Passage #: 3

Dilute Ampule Content: 1:10 (T-25) or 1:15 (T-75)

Volume/Ampule: 1 mL

A T-25 setup at a dilution of 1:10, using culture medium as described in the product information sheet, reaches approximately 60-70% confluence within 24 to 48 hours.