



## Product Sheet

# Dubca (ATCC® CRL-2276™)

Please read this FIRST



### Intended Use

This product is intended for research use only. It is not intended for any animal or human therapeutic or diagnostic use.

### Complete Growth Medium

The base medium for this cell line is ATCC-formulated Eagle's Minimum Essential Medium, Catalog No. 30-2003. To make the complete growth medium, add the following components to the base medium: fetal bovine serum to a final concentration of 10%.

### Citation of Strain

If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: Dubca (ATCC® CRL-2276™)

American Type Culture Collection  
PO Box 1549  
Manassas, VA 20108 USA  
[www.atcc.org](http://www.atcc.org)

800.638.6597 or 703.365.2700  
Fax: 703.365.2750  
Email: [Tech@atcc.org](mailto:Tech@atcc.org)

Or contact your local distributor

## Description

**Organism:** *Camelus dromedarius*, camel  
**Tissue:** skin  
**Disease:** Autopsy  
**Cell Type:** SV40 transformed  
**Age:** 2 months gestation  
**Gender:** female  
**Morphology:** fibroblast  
**Growth Properties:** monolayer

## Batch-Specific Information

Refer to the Certificate of Analysis for batch-specific test results.

## SAFETY PRECAUTION

ATCC 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 submerged 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.

## Unpacking & Storage Instructions

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.

## Handling Procedure for Frozen Cells

### HANDLING PROCEDURE FOR FROZEN CELLS

- Initiate culture as soon as possible upon receipt.
- Thaw by rapid agitation in 37°C water bath. Thawing should be rapid (within 40-60 seconds). As soon as the ice is melted, remove the ampule from the water bath. All of the operations from this point on should be carried out under strict aseptic conditions.
- Transfer the cell suspension and dilute it with the recommended culture medium in a culture flask (see specific batch information above for dilution ratio); incubate at 37°C with 5% CO<sub>2</sub> in air atmosphere. Since it is important to avoid excessive alkalinity of the medium during recovery of the cells, it is suggested that the culture medium be placed into the culture flask, tube, etc. and the pH be adjusted, as necessary, prior to the addition of the vial contents. Note that the bicarbonate content of the culture medium will determine whether an atmosphere containing CO<sub>2</sub> will be required.
- It is not necessary to remove the freezing additive. However, if desired, the culture medium may be changed to remove the protective freezing additive (dimethylsulfoxide) 24 hours after thawing. If it is desired that the freezing additive be removed immediately, or that a more concentrated cell suspension be obtained, centrifuge the above diluted suspension at approximately 125 x g for 10 minutes, discard the fluid and resuspend the cells with growth medium at the dilution ratio given in the specific batch information above.

### FLUID RENEWAL

Every 2-3 days.

### SUBCULTURE PROCEDURE

Remove medium, rinse with trypsin (0.25%) - EDTA (0.03%) solution. Add 1-2 ml additional trypsin solution and allow flasks to remain at room temperature (or incubate at 37°C) until cells detach. Add fresh culture medium, aspirate and dispense into new culture flasks.



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Subcultivation ratio: 1:4 to 1:6 is recommended.



### Handling Procedure for Flask Cultures

#### HANDLING PROCEDURE FOR FLASK CULTURES (MONOLAYER)

The flask was seeded with cells (see specific batch information above for concentration), grown and completely filled with medium to prevent loss of cells in transit. Remove all of the medium (which can be saved and used as fresh medium) except for a sufficient volume (5-10 ml) to cover the floor of the flask. Incubate at 37°C in a 5% CO<sub>2</sub> in air atmosphere. Sometimes in transit the cultures are handled roughly and most of the cells become detached and float in the culture medium. If this has occurred remove the entire contents of the flask and centrifuge at 300 x g for 15 minutes. Draw off the excess supernatant medium, resuspend the cells in 10 ml of the culture medium and plant the entire cell suspension in a single flask of suitable size (about 25 sq. cm.).



### Subculturing Procedure

**Subcultivation Ratio:** A subcultivation ratio of 1:4 to 1:6 is recommended

**Medium Renewal:** Every 2 to 3 days

Remove medium, rinse with 0.25% trypsin, 0.03% EDTA solution, add an additional 1 to 2 ml of trypsin solution and allow the flask to set at room temperature (or incubate at 37C) until cells detach.

Add fresh culture medium, aspirate and dispense into new culture flasks.



### Comments

The cell line designated Dubca (Dubai Camel) was originated in 1990 from a specimen taken from a fetus during the autopsy of the mother at the Veterinary Research Laboratory in Dubai, UAE. Cells at passage 7 were transformed by infection with SV40 and the resulting cells were cloned in soft agar. SV40 large T-antigen is detected by Western blotting.

The cell line is susceptible to infection with viruses of several different families.

Orf, Newcastle disease virus (NDV) and Sindbis virus show an abortive infection with virus replicating only in the first passages.

While some isolates of bovine viral diarrhea virus (BVDV) and border disease virus (BDV) could not be grown in Dubca cells other isolates could be propagated to a limited extent (only a few cells expressed viral antigen). The cells may be used for virus diagnosis and vaccine production.



### References

References and other information relating to this product are available online at [www.atcc.org](http://www.atcc.org).



### Biosafety Level: 2

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the current publication of the *Biosafety in Microbiological and Biomedical Laboratories* from the U.S. Department of Health and Human Services Centers for Disease Control and Prevention and National Institutes for Health.

### ATCC Warranty

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### Disclaimers

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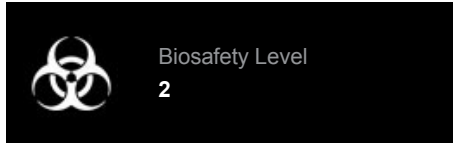


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confirmed to be accurate.

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Please see the enclosed Material Transfer Agreement (MTA) for further details regarding the use of this product. The MTA is also available on our Web site at [www.atcc.org](http://www.atcc.org)

Additional information on this culture is available on the ATCC web site at [www.atcc.org](http://www.atcc.org).

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