



MDA PCa 2b

CRL-2422™

Product Sheet

Description

MDA PCa 2b is a cell line exhibiting epithelial-like morphology that was isolated from the prostate of a 63-year-old, Black male patient with adenocarcinoma. This cell line was deposited by NM Navone.

Organism: *Homo sapiens*, human

Tissue: Prostate

Age: 63 years

Gender: Male

Morphology: epithelial

Growth properties: Adherent

Disease: Adenocarcinoma

Storage Conditions

Product format: Frozen

Storage conditions: Vapor phase of liquid nitrogen

Intended Use

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

BSL 1

ATCC determines the biosafety level of a material based on our risk assessment as guided by the current edition of *Biosafety in Microbiological and Biomedical Laboratories (BMBL)*, U.S. Department of Health and Human Services. It is your responsibility to

understand the hazards associated with the material per your organization's policies and procedures as well as any other applicable regulations as enforced by your local or national agencies.

ATCC highly recommends that appropriate personal protective equipment is always used when handling vials. For cultures that require storage in liquid nitrogen, it is important to note that some vials may 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 vial exploding or blowing off its cap with dangerous force creating flying debris. Unless necessary, ATCC recommends that these cultures be stored in the vapor phase of liquid nitrogen rather than submersed in liquid nitrogen.

Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at www.atcc.org.

Growth Conditions

Temperature: 37°C

Atmosphere: 95% Air, 5% CO₂

Handling Procedures

Unpacking and 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.

Complete medium: The base medium for this cell line is F-12K Medium (ATCC 30-2004). To make the complete growth medium, add the following components to the base medium:

- non heat-inactivated fetal bovine serum (FBS; ATCC 30-2020) to a final concentration of 20%
- 25 ng/ml cholera toxin (Sigma cat# C8052)
- 10 ng/ml mouse Epidermal Growth Factor (Corning cat# 354010)
- 0.005 mM phosphoethanolamine (Sigma cat# P0503)
- 100 pg/ml hydrocortisone (Sigma cat# H0135)
- 45 nM sodium selenite (Sigma cat# 9133)
- 0.005 mg/ml human recombinant insulin (Life Technologies cat# 12585-014)

Because of limited stability, the EGF should be added to an aliquot of the above culture medium fresh prior to seeding or performing fluid changes. Complete media supplemented with the below item expires 10 days after preparation.

Prepare 10 ug/mL EGF and then use 1 uL per mL culture medium

Do not filter complete medium.

Handling Procedure: 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.

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 the 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 a centrifuge tube containing 9.0 mL complete culture medium and centrifuge at approximately 280 x g for 10 minutes. Discard the supernatant and resuspend the cells with recommended growth media (see the specific lot information on the Certificate of Analysis for

culture recommended dilution ratio) and dispense into a 25 cm² or a 75 cm² culture flask as recommended on the Certificate of Analysis

4. Incubate the culture at 37°C in a suitable incubator. A 5% CO₂ in air atmosphere is recommended if using the medium described on this product sheet.

Comments:

The cells may pile up and growth may be patchy.

Cells may be loosely attached or floating for several days after subculture to new vessels.

Floating cells (if present) should not be subcultured.

Recommended Start up Seeding Density 8.0 x 10⁴ to 2.0 x 10⁵ viable cells/cm²

Subculturing procedure: Volumes used in this protocol are for 75 cm² flask; proportionally reduce or increase amount of dissociation medium for culture vessels of other sizes.

1. Remove and discard culture medium.
2. Briefly rinse the cell layer with 0.25% (w/v) Trypsin-0.53 mM EDTA solution to remove all traces of serum that contains trypsin inhibitor.
3. Add 2.0 to 3.0 mL of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes).

Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal.

4. Add 6.0 to 8.0 mL of complete growth medium and aspirate cells by gently pipetting.
5. To remove trypsin-EDTA solution, transfer cell suspension to centrifuge tube and spin at approximately 125 x g for 5 to 10 minutes.
6. Discard supernatant and resuspend cells in fresh growth medium. Add appropriate aliquots of cell suspension to new culture vessels.
7. Incubate cultures at 37°C

Subculture Restrictions:

Subculture at <70% confluency.

Do not allow the cells to become 100% confluent.

Subculture Ratio: 1:2 to 1:4

Medium Renewal: Every 3 to 4 days. Beware cells may be loosely attached or floating for several days before attaching.

Note: For more information on enzymatic dissociation and subculturing of cell lines consult Chapter 10 in **Culture of Animal Cells, a manual of Basic Technique** by R. Ian Freshney, 3rd edition, published by Alan R. Liss, N.Y., 1994.

Reagents for cryopreservation: Complete culture medium described above supplemented with 5% (v/v) DMSO.

Cell culture tested DMSO is available as ATCC Catalog No. 4-X.

Note: Lots manufactured prior to 05/06/2020 may have used a different cryopreservative, contact Product Experience if needed.

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: MDA PCa 2b (ATCC CRL-2422)

References

References and other information relating to this material are available at www.atcc.org.

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