Brx50

CRL-3648™

Description

Brx50 is a suspension Circulating Tumor Cell (CTC) line derived from a patient undergoing treatment for metastatic breast cancer. Breast cancer CTCs shed from a primary tumor and circulate through the bloodstream increasing the risk for metastatic disease. Due to these metastatic characteristics, Brx50 is intended for the study of early diagnosis and monitoring of tumor progression for metastatic breast cancer.

Organism: *Homo sapiens*, human
Cell Type: epithelial-like cell
Tissue: Breast
Age: 42 years
Gender: Female
Morphology: Rounded with clusters
Growth properties: Suspension
Disease: Breast Cancer
Cells per vial: ≥ 3.0 x 10^6
Volume: 1.0 mL

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: Hypoxic: 4% O_2, 5% CO_2

Handling Procedures

Complete medium:

The base medium is Gibco™ RPMI, GlutaMAX (ThermoFisher catalog # 61870-036). To make the complete growth medium, add the following components to the base medium:

- Gibco™ B27 Supplement (50x) (ThermoFisher Scientific catalog #17504-044) to a final concentration of 2%.

  Due to limited stability, at each sub-culture, the following components should be added to the complete medium:

- Gibco™ EGF (ThermoFisher Scientific catalog # PHG0311 or equivalent) to a final concentration of 20 ng/mL.
- Gibco™ FGF (ThermoFisher Scientific catalog # PHG0261 or equivalent) to a final concentration of 20 ng/mL.

Handling Procedure:

To ensure 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 spin at approximately 300x *g* for 3 minutes.
4. Resuspend cell pellet in 5 mL fresh pre-warmed complete growth medium, and transfer the cell suspension into a vented, Ultra-low attachment culture flask (Corning® Catalog # 4616 or 3814). NOTE: This cell line has a lower post-thaw viability and recover slowly, which will may take a few subcultures to fully recover.
5. Incubate the culture at 37° C in a suitable incubator. A 5% CO_2 in 4% O_2 air atmosphere is recommended if using the medium described on this product sheet.

6. It is recommended to subculture every 3 days or when the medium pH begins to change.

Subculturing procedure:
Cultures can be maintained by centrifugation and can then be established by resuspending the cells in fresh medium at 1 X 10^5 viable cells/mL. Maintain cell density between 1.0 X 10^5 and 5 X 10^5 cells/mL.

Medium Renewal: Every 2 to 3 days (depending on medium pH).
Reagents for cryopreservation: ATCC Stem Cell Freezing Media (ATCC 30-2200)
Cryopreservation: Stem Cell Freeze Media (ATCC 30-2200)

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: Brx50 (ATCC CRL-3648)

References

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

Warranty

The product is provided 'AS IS' and the viability of ATCC® products is warranted for 30 days from the date of shipment, provided that the customer has stored and handled the product according to the information included on the product information sheet, website, and Certificate of Analysis. For living cultures, ATCC lists the media formulation and reagents that have been found to be effective for the product. While other unspecified media and reagents may also produce satisfactory results, a change in the ATCC and/or depositor-recommended protocols may affect the recovery, growth, and/or function of the product. If an alternative medium formulation or reagent is used, the ATCC warranty for viability is no longer valid.

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Contact Information

ATCC
10801 University Boulevard
Manassas, VA 20110-2209
USA
US telephone: 800-638-6597
Worldwide telephone: +1-703-365-2700
Email: tech@atcc.org or contact your local distributor