www.blossombioscience.com
info@blossombioscience.com

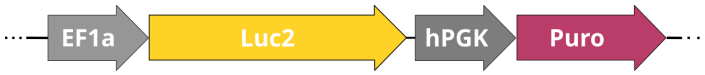
Product sheet

BxPC3-Luc (polyclonal)

Product Description

Product Name:	BxPC3-Luc (polyclonal)
Product-ID:	CL1004
Product Format:	Frozen
Lot. Number:	Upon arrival on cryo vial
Organism:	Homo Sapiens
Morphology:	Epithelial
Growth:	Adherent
Tissue:	Pancreas
Disease:	Adenocarcinoma
Parental Cell Line:	BxPC3
Reporter:	Firefly Luciferase, Luc2
Selection:	Puromycin 1µg/ml
BioSafety:	BSL2
Quantity:	1 cryo vial contains 5 Mio cells
Shipping:	Dry Ice

The polyclonal cell line BxPC3-Luc is derived from the pancreatic adenocarcinoma cell line BxPC3 and was generated through lentiviral vector-mediated transduction. This vector encodes the firefly luciferase gene (luc2) controlled by the EF-1 alpha promoter, along with the gene for Puromycin N-acetyl-transferase regulated by the hPGK promoter. BxPC3-Luc demonstrates stable expression of luciferase and resistance to Puromycin.



EF1a Human eukaryotic translation elongation factor 1 alpha promoter
Luc2 Humanized firefly luciferase, codon optimized
hPGK Human phosphoglycerate kinase 1 promotor
Puro Puromycin resistance gene

Storage Conditions

Upon receipt, promptly transfer the cells to storage at or below -140°C, preferably within the liquid nitrogen vapor phase. Perform a thorough inspection for any signs of damage or leakage upon arrival.

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.

Safety

BioSafety Level 2

Blossom BioScience 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.

Blossom BioScience strongly recommends using appropriate personal protective equipment when handling cryovials. Some vials may leak during liquid nitrogen storage and fill with liquid nitrogen, which can cause the cap to eject or the vial to rupture upon thawing. To minimize this risk, cultures should preferably be stored in the vapor phase rather than submerged in liquid nitrogen. ***The recipient of the material is solely responsible for ensuring compliance with all applicable safety guidelines and for conducting a proper risk assessment prior to handling, storage, or use of the material.***

Growth Conditions

Temperature:	37°C
Atmosphere:	95% Air, 5% CO_2

Handling Procedures

Complete medium:

Base medium:	RPMI-1640 with 2mM glutamine
Supplements:	10% Fetal bovine serum, 1µg/ml Puromycin (optional)

Handling upon arrival:

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 -80°C. Storage at -80°C will result in loss of viability.

1. Prepare a Class II Biological Safety Cabinet (BSC) following standard aseptic work practices. Ensure that all work surfaces are disinfected and that the cabinet airflow has been running for several minutes before use.
2. Prepare a 75cm^2 culture flask (T75) containing 18mL of complete growth medium. For adherent cell cultures, use a flask with tissue culture surface treatment. Ensure that the medium is at room temperature prior to use.
3. Thaw the cryovial rapidly in a 37 °C water bath. To minimize the risk of contamination, ensure that the vial cap remains

Product sheet

BxPC3-Luc (polyclonal)

above the water surface. The thawing process should be completed within 2 minutes.

4. Remove the cryovial from the water bath as soon as a small ice crystal remains in the center. Immediately decontaminate the exterior of the vial by spraying it with 70% ethanol. From this point onward, all procedures must be performed under strict aseptic conditions within a Class II Biological Safety Cabinet (BSC).
5. Add 0.5mL of complete growth medium to the thawed cryovial and gently resuspend the cell pellet (use 2ml serological pipette). Slowly, transfer the entire contents of the cryovial into the prepared T75 culture flask containing complete growth medium. Resuspend the cell solution several times.
6. Incubate the culture overnight at 37 °C in a humidified atmosphere with 5% CO_2.
7. Approximately 16 hours after thawing (next day), carefully replace the culture medium with fresh, complete growth medium that has been equilibrated to room temperature. This step ensures the complete removal of residual DMSO from the freezing medium, which may be toxic to the cells if left in the culture.
8. When the culture reaches approximately 80% confluence, dissociate the cells, determine cell count and viability, and reseed them into new culture vessels (e.g., T75 flasks). Within 5–7 days, the culture should display normal growth characteristics.

Subculturing procedure:

Maintain cultures between 20% and 90% confluence. Seed new cultures at a density of ~1 × 10^4 viable cells/cm^2 and subculture when cells reach approximately 85–90% confluence.
Medium Renewal: Every 2 to 3 days
For a detailed subculturing protocol go to www.blossombioscience.com > resources > Protocol for Subculturing of Adherent Cells

Cryopreservation:

Complete growth medium supplemented with 5% (v/v) DMSO.

Citation

If the material is used in any publication, it should be explicitly cited as “BxPC3-Luc (www.blossombioscience.com)”.

Support and Inquiries

Should you have any questions, please visit our website at www.blossombioscience.com or contact us via email at info@blossombioscience.com.

Disclaimer