

FGC LNCaP | 305220

General information

Description	LNCaP FGC (Fast Growing Colonies) is a highly proliferative, androgen-independent, metastatic cell line derived from a human prostate cancer specimen. It is characterized by rapid growth, high tumorigenicity, and resistance to androgen deprivation therapy. LNCaP FGC is a derivative of the LNCaP cell line, which is a well-established model for studying prostate cancer biology and drug response. LNCaP FGC is a highly proliferative, androgen-independent, metastatic cell line derived from a human prostate cancer specimen. It is characterized by rapid growth, high tumorigenicity, and resistance to androgen deprivation therapy. LNCaP FGC is a derivative of the LNCaP cell line, which is a well-established model for studying prostate cancer biology and drug response.
Organism	Human
Tissue	Prostate
Disease	Prostate cancer
Metastatic site	Prostate, lymph nodes, bone, lung, liver, brain
Synonyms	LNCaP-Clone-FGC, LNCaP.FGC, LNCaP-FGC, LNCaP FGC, LNCAPCLONEFGC, LNCaP-ATCC

Cell characteristics

Age	50 years
Gender	Male
Ethnicity	White
Morphology	Epithelial
Growth properties	Highly proliferative, androgen-independent, metastatic

Identification and safety

Citation	LNCaP FGC (ATCC CCL-221) Cytion 305220
Biosafety level	1
NCBI_TaxID	9606
CellosaurusAccession	CVCL_1379

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Cell Line: FGC LNCaP

Karyotype 46, XY, t(12;21)(p13;q22) [84]

Cell Line: FGC LNCaP

Culture Medium RPMI 1640, w: 2.0 mM Glutamine, w: 2.0 g/L NaHCO₃ (Cytion 820700a)

Supplements 10% FBS

Dissociation Reagent Trypsin

Doubling time 34-43 days

Subculturing Cells are grown in 25 cm² flasks in RPMI 1640 medium supplemented with 10% FBS. When cells reach 80-90% confluency, they are trypsinized and seeded into new flasks. The medium is changed every 3-5 days.

Freeze medium RPMI 1640 medium supplemented with 10% FBS and 10% DMSO. Cells are seeded into cryovials and frozen at -150°C.

Thawing and Culturing Cells

1. Thaw cells rapidly in a water bath at 37°C. Transfer cells to a 15 mL tube and centrifuge at 300 x g for 3 minutes. Remove supernatant and resuspend cells in 1 mL of RPMI 1640 medium supplemented with 10% FBS. Seed cells into a 25 cm² flask.
2. Allow cells to attach for 24 hours. Change medium to RPMI 1640 medium supplemented with 10% FBS.
3. When cells reach 80-90% confluency, trypsinize and seed into new flasks.
4. Cells are grown in 25 cm² flasks in RPMI 1640 medium supplemented with 10% FBS. When cells reach 80-90% confluency, they are trypsinized and seeded into new flasks. The medium is changed every 3-5 days.
5. Cells are grown in 25 cm² flasks in RPMI 1640 medium supplemented with 10% FBS. When cells reach 80-90% confluency, they are trypsinized and seeded into new flasks. The medium is changed every 3-5 days.
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Flask Coating 

[illegible]

Sterility

1. 所有培养基、试剂、耗材均需灭菌。
 2. 实验过程中，所有操作需在生物安全柜内进行，避免污染。