

NCI-H2122 | 305600

General information

Description	NCI-H2122 is a cell line derived from a primary tumor of a patient with non-small cell lung cancer (NSCLC). The cell line is characterized by the presence of the KRAS mutation, which is a common genetic alteration in NSCLC. The cell line is highly tumorigenic and has been used in various preclinical studies to investigate the role of KRAS in lung cancer progression. NCI-H2122 cells are grown in RPMI 1640 medium supplemented with 10% fetal bovine serum (FBS). The cell line is maintained in a humidified atmosphere of 5% CO ₂ at 37°C. NCI-H2122 cells are highly tumorigenic and have been used in various preclinical studies to investigate the role of KRAS in lung cancer progression. NCI-H2122 cells are grown in RPMI 1640 medium supplemented with 10% fetal bovine serum (FBS). The cell line is maintained in a humidified atmosphere of 5% CO ₂ at 37°C.
Organism	Human
Tissue	Lung
Disease	Non-small cell lung cancer
Metastatic site	Adipose tissue, lymph node, bone marrow
Synonyms	H2122, H-2122, NCIH2122

Cell characteristics

Age	46 years
Gender	Male
Ethnicity	White
Morphology	Epithelial, glandular
Growth properties	Adherent

Cell authentication and quality control

Citation	NCI-H2122 (Cytion 305600)
Biosafety level	1
NCBI_TaxID	9606

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CellosaurusAccession CVCL_1531

NCI-H2122 - NCI-H2122

Mutational profile KRAS, p.Gly12Cys (c.34G>T), TP53, p.Gln16Leu (c.47A>T), TP53, p.Cys176P

NCI-H2122

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

Supplements 10% FBS

Dissociation Reagent

Subculturing 300xg 3 min, 1:3 or 1:4.

Split ratio 1:3 or 1:4.

Fluid renewal 2 or 3 times per week

Freeze medium (FBS) + 10% DMSO

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Thawing and
Culturing Cells

1. 将细胞冻存管放入 37°C 水浴中快速解冻，离心 300 x g，5 分钟，弃去上清液，将细胞重悬于 1 mL 完全培养基中。
2. 将细胞悬液接种到含有 10 mL 完全培养基的 T25 培养瓶中，在 37°C、5% CO₂ 条件下培养。
3. 当细胞汇合率达到 70-80% 时，将细胞传代到新的 T25 培养瓶中。
4. 将细胞传代到新的 T25 培养瓶中，使用 0.25% 胰蛋白酶消化 2-3 分钟，离心 300 x g，5 分钟，弃去上清液，将细胞重悬于 1 mL 完全培养基中。
5. 将细胞悬液接种到含有 10 mL 完全培养基的 T25 培养瓶中，在 37°C、5% CO₂ 条件下培养。
6. 当细胞汇合率达到 70-80% 时，将细胞传代到新的 T25 培养瓶中。
7. 将细胞传代到新的 T25 培养瓶中，使用 0.25% 胰蛋白酶消化 2-3 分钟，离心 300 x g，5 分钟，弃去上清液，将细胞重悬于 1 mL 完全培养基中。
8. 将细胞悬液接种到含有 10 mL 完全培养基的 T25 培养瓶中，在 37°C、5% CO₂ 条件下培养。

Incubation
Atmosphere

37°C, 5% CO₂, 饱和湿度

Flask Coating

无涂层

Freezing
Procedure

将细胞悬液接种到含有 1 mL 完全培养基的冻存管中，加入 10% 冻存液，在 -80°C 下冻存。

Shipping
Conditions

将细胞冻存管放入冰袋中，在 -80°C 条件下运输。

Storage
Conditions

将细胞冻存管放入 -150 至 -196°C 液氮中储存。

细胞特性与鉴定

Sterility

细胞在接种前经过严格灭菌处理，PCR 检测无支原体污染。细胞在培养过程中定期进行无菌检测，确保细胞无污染。