

## Data Sheet

PAGE 1/3

<b>BCRJ Code:</b>	0352
<b>Cell Line:</b>	NCI-H1975 [H-1975, H1975]
<b>Species:</b>	Homo sapiens
<b>Vulgar Name:</b>	Human
<b>Tissue:</b>	Lung
<b>Morphology:</b>	Epithelial
<b>Disease:</b>	Adenocarcinoma, Non-Small Cell Lung Cancer
<b>Growth Properties:</b>	Adherent
<b>Sex:</b>	Female
<b>Derivation:</b>	The line was established in July 1988. The tissue donor was a non-smoker.
<b>Biosafety:</b>	1
<b>Culture Medium:</b>	RPMI-1640 medium modified to contain 2 mM L-glutamine, 4500 mg/L glucose with fetal bovine serum to a final concentration of 10%.
<b>Subculturing:</b>	Remove medium, and rinse the monolayer with PBS without calcium and magnesium. Remove the trypsin, add fresh trypsin and let the culture sit at room temperature (or at 37°C) until the cells detach (about 10 minutes). Add fresh medium, aspirate and dispense into new flasks. T-75 flasks are recommended for subculturing this product. NOTE: For more information on enzymatic dissociation and subculturing of cell lines consult Chapter 12 in Culture of Animal Cells, a manual of Basic Technique by R. Ian Freshney, 6th edition, published by Alan R. Liss, N.Y., 2010.
<b>Subculturing Medium Renewal:</b>	Two to three times weekly

## Data Sheet

PAGE 2/3

### Subculturing Subcultivation Ratio:

1:3 to 1:6

### Culture Conditions:

Atmosphere: air, 95%; carbon dioxide (CO<sub>2</sub>), 5% Temperature: 37°C

### Cryopreservation:

95% FBS + 5% DMSO (Dimethyl sulfoxide)

### Thawing Frozen Cells:

**SAFETY PRECAUTION:** It is strongly recommended to always wear protective gloves, clothing, and a full-face mask when handling frozen vials. Some vials may leak when submerged in liquid nitrogen, allowing nitrogen to slowly enter the vial. Upon thawing, the conversion of liquid nitrogen back to its gas phase may cause the vial to explode or eject its cap with significant force, creating flying debris.

1. Thaw the vial by gently agitating it in a 37°C water bath. To minimize 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 its contents are thawed and decontaminate it by dipping in or spraying with 70% ethanol. From this point, all operations must be performed under strict aseptic conditions.
3. For cells sensitive to DMSO, it is recommended to remove the cryoprotective agent immediately. Transfer the vial contents to a centrifuge tube containing 9.0 mL of complete culture medium and centrifuge at approximately 125 × g for 5 to 7 minutes.
4. Discard the supernatant and resuspend the cell pellet in the recommended complete medium (see specific batch information for the appropriate dilution ratio).
5. Incubate the culture under appropriate atmospheric and temperature conditions (see "Culture Conditions" for this cell line).

**NOTE:** It is important to avoid excessive alkalinity of the medium during cell recovery. To minimize this risk, it is recommended to place the culture vessel containing the growth medium in the incubator for at least 15 minutes before adding the vial contents. This allows the medium to stabilize at its normal pH (7.0 to 7.6).

### References:

NCI-Navy Medical Oncology Branch Cell Line Supplement. J. Cell. Biochem. suppl. 24: 1996. Sordella R, et al. Gefitinib-sensitizing EGFR mutations in lung cancer activate anti-apoptotic pathways. Science 305: 1163-1167, 2004. PubMed: 15284455

### Depositors:

Lidia Moreira Lima - UNIVERSIDADE FEDERAL DO RIO DE JANEIRO Rui Manoel Reis - Fundação Pio XII



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**Cellosaurus:**

[CVCL\\_1511](#)