

## Data Sheet

<b>BCRJ Code:</b>	0408
<b>Cell Line:</b>	CAKI 2
<b>Species:</b>	Homo sapiens
<b>Vulgar Name:</b>	Human
<b>Tissue:</b>	Kidney
<b>Cell Type:</b>	Epithelial
<b>Morphology:</b>	Epithelial
<b>Disease:</b>	Clear cell Carcinoma
<b>Growth Properties:</b>	Adherent
<b>Sex:</b>	Male
<b>Age/Ethnicity:</b>	69 Year / White
<b>Applications:</b>	3D cell culture; Cancer research
<b>Tumor Formation::</b>	Yes, in nude mice; forms clear cell carcinoma
<b>Products:</b>	Antigen expression: Blood Type A; Rh- Isoenzymes: AK-1, 1 ES-D, 1 G6PD, B GLO-I, 1-2 Me-2, 1 PGM1, 1 PGM3, 1
<b>Biosafety:</b>	1
<b>Culture Medium:</b>	McCoy's 5a + 2mM Glutamine + 10% of Fetal Bovine Serum (FBS).
<b>Subculturing:</b>	Remove medium, and rinse with 0.25% trypsin, 0.03% EDTA solution. Remove the solution and add an additional 1 to 2 mL of trypsin-EDTA solution. Allow the flask to sit at room temperature (or at 37°C) until the cells detach. Add fresh culture medium, aspirate and dispense into new culture flasks.

**Subculturing Medium  
Renewal:**

2 to 3 times per week

**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 highly recommended that protective gloves and clothing always be used and a full face mask always be worn when handling frozen vials. It is important to note that some vials leak when submerged 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 vessel exploding or blowing off its cap with dangerous force creating flying debris. 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. For cells that are sensitive to DMSO it is recommended that the cryoprotective agent be removed immediately. Transfer the vial contents to a centrifuge tube containing 9.0 mL complete culture medium and spin at approximately 125 x g for 5 to 7 minutes. 4. Discard the supernatant and Resuspend cell pellet with the recommended complete medium (see the specific batch information for the culture recommended dilution ratio). 5. Incubate the culture in an appropriate atmosphere and temperature (see "Culture Conditions" for this cell line). **NOTE:** It is important to avoid excessive alkalinity of the medium during recovery of the cells. It is suggested that, prior to the addition of the vial contents, the culture vessel containing the growth medium be placed into the incubator for at least 15 minutes to allow the medium to reach its normal pH (7.0 to 7.6).

**References:**

Fogh J. Human tumor cells in vitro. New York: Plenum Press; 1975. Fogh J, et al. Absence of HeLa cell contamination in 169 cell lines derived from human tumors. J. Natl. Cancer Inst. 58: 209-214, 1977. PubMed: 833871 Goodfellow M, et al. One hundred and twenty-seven cultured human tumor cell lines producing tumors in nude mice. J. Natl. Cancer Inst. 59: 221-226, 1977. PubMed: 77210034 Fogh J. Cultivation, characterization, and identification of human tumor cells with emphasis on kidney, testis, and bladder tumors. Natl. Cancer Inst. Monogr. 49: 5-9, 1978. PubMed: 571047 Kovacs G, et al. The Heidelberg classification of renal cell tumors. J. Pathol. 183: 131-133, 1997. PubMed: 9390023

**Depositors:**

Banco de Células do Rio de Janeiro

**ATCC:**

HTB-47