

# Human Kidney tumor Cell lines

Part of the CLS cell bank

CLS Cell Lines Service



**Table 1: Human Kidney cancer cell lines: Origin and General Characteristics**

Name of cell line	Cell type	Organism / Ethnicity	Age / Gender	Tissue / Disease	Morphology	Growth properties	CLS order no.
769-P <sup>1</sup>	Human Renal cell adenocarcinoma cell line	Homo sapiens (Human) / Caucasian	63 / Female	Kidney / Carcinoma	Epithelial	Monolayer, adherent	300106
786-O <sup>1</sup>	Human Renal cell adenocarcinoma cell line	Homo sapiens (Human) / Caucasian	58 / Male	Kidney / Carcinoma	Epithelial	Monolayer, adherent	300107
A-498 <sup>2</sup>	Human Kidney Carcinoma cell line	Homo sapiens (Human) / Caucasian	52 / Male	Kidney / Carcinoma	Epithelial	Monolayer, adherent	300113
A-704 <sup>2</sup>	Human adenocarcinoma cell line	Homo sapiens (Human) / Caucasian	78 / Male	Kidney / Carcinoma	Epithelial	Monolayer, adherent	300217
ACHN <sup>3</sup>	Human adenocarcinoma cell line	Homo sapiens (Human) / Caucasian	22 / Male	Kidney / Carcinoma	Epithelial	Monolayer, adherent	300117
CaKi-1 <sup>4</sup>	Human Clear cell carcinoma cell line	Homo sapiens (Human) / Caucasian	49 / Male	Kidney / Carcinoma	Epithelial	Monolayer, adherent	300149
CaKi-2 <sup>4</sup>	Human Clear cell carcinoma cell line	Homo sapiens (Human) / Caucasian	69 / Male	Kidney / Carcinoma	Epithelial	Monolayer, adherent	300140
HEK293 <sup>5</sup>	Human Kidney Carcinoma Cell Line	Homo sapiens (Human) / Caucasian	Fetus Female	Kidney / Carcinoma	Epithelial	Monolayer, adherent	300192
RCC-ER (KTCTL- 13) <sup>6</sup>	Human clear cell renal cell carcinoma cell line	Homo sapiens (Human) / Caucasian	57 / Male	Kidney / CCRCC, Carcinoma, pT3a, N1, Mx/GIII	Epithelial	Monolayer, adherent	300238
RCC-FG1 (KTCTL- 26) <sup>6</sup>	Human clear cell renal cell carcinoma cell line	Homo sapiens (Human) / Caucasian	69 / Male	Kidney / CCRCC, Carcinoma, pT2a, M1/ GI	Epithelial	Monolayer, adherent	300248
RCC-FG2 (KTCTL- 26A) <sup>6,7</sup>	Human clear cell renal cell carcinoma cell line	Homo sapiens (Human) / Caucasian	77 / Male	Kidney / CCRCC, Carcinoma, pT2a, Nx, M1/GII	Epithelial	Monolayer, adherent	300249
RCC-GH	Human clear cell renal cell carcinoma cell line	Homo sapiens (Human) / Caucasian	63 / Male	Kidney / CCRCC, Carcinoma	Epithelial	Monolayer, adherent	300252
RCC-GS (KTCTL-185)	Human clear cell renal cell carcinoma cell line	Homo sapiens (Human) / Caucasian	56 / Male	Kidney / CCRCC, Carcinoma, pT3b, No, M1/ GIII (brain metastasis)	Epithelial	Monolayer, adherent	300241
RCC-HB (KTCTL- 48)	Human clear cell renal cell carcinoma cell line	Homo sapiens (Human) / Caucasian	63 / Male	Kidney / CCRCC, Carcinoma, pT3a, Mo, No, GI-II	Epithelial	Monolayer, adherent	300253

Name of cell line	Cell type	Organism / Ethnicity	Age / Gender	Tissue / Disease	Morphology	Growth properties	CLS order no.
RCC-JF (KTCTL-140)	Human clear cell renal cell carcinoma cell line	Homo sapiens (Human) / Caucasian	65 / Female	Kidney / CCRCC, Carcinoma	Epithelial	Monolayer, adherent	300274
RCC-JW (KTCTL-195)	Human clear cell renal cell carcinoma cell line	Homo sapiens (Human) / Caucasian	46 / Male	Kidney / CCRCC, Carcinoma	Epithelial	Monolayer, adherent	300244
RCC-KL	Human clear cell renal cell carcinoma cell line	Homo sapiens (Human) / Caucasian	51 / Male	Kidney / CCRCC, Carcinoma	Epithelial	Monolayer, adherent	300281
RCC-KP (KTCTL-53)	Human clear cell renal cell carcinoma cell line	Homo sapiens (Human) / Caucasian	59 / Male	Kidney / CCRCC, Carcinoma	Epithelial	Monolayer, adherent	300254
RCC-LR (KTCTL-120)	Human clear cell renal cell carcinoma cell line	Homo sapiens (Human) / Caucasian	63 / Female	Kidney / CCRCC, Carcinoma	Epithelial	Monolayer, adherent	300236
RCC-MF (KTCTL-1M) <sup>8</sup>	Human clear cell renal cell carcinoma cell line	Homo sapiens (Human) / Caucasian	63 / Male	Kidney / CCRCC, Carcinoma, pT2, N1, Mx/ GII-III (lung-metastasis)	Epithelial	Monolayer, adherent	300245
RCC-MH (KTCTL-129)	Human clear cell renal cell carcinoma cell line	Homo sapiens (Human) / Caucasian	59 / Female	Kidney / CCRCC, Carcinoma, pT2, No, M0/GII	Epithelial	Monolayer, adherent	300237
RCC-OF1 (KTCTL-54)	Human clear cell renal cell carcinoma cell line	Homo sapiens (Human) / Caucasian	61 / Male	Kidney / CCRCC, Carcinoma, pT2, Nx, Mx/GI	Epithelial	Monolayer, adherent	300255
RCC-PR	Human clear cell renal cell carcinoma cell line	Homo sapiens (Human) / Caucasian	81 / Female	Kidney / CCRCC, Carcinoma	Epithelial	Monolayer, adherent	300267
RCC-WK (KTCTL-87)	Human clear cell renal cell carcinoma cell line	Homo sapiens (Human) / Caucasian	75 / Male	Kidney / CCRCC, Carcinoma, pT3b, No, Mx/ GII	Epithelial	Monolayer, adherent	300243
WT-CLS1 <sup>9</sup>	Human primary Wilms' tumor cell line	Homo sapiens (Human) / Caucasian	5 / Female	Kidney / Wilms' tumor	Epithelial	Monolayer, adherent	300379

**Table 2: Human Head and Neck squamous cell carcinoma cell lines: Special Features**

Name of cell line	Cell type	Cell Marker	Karyotype	Genotype	Secretion of Products	Ref ID in Cellosaurus <sup>10</sup>	CLS order no.
769-P <sup>1</sup>	Human Renal cell adenocarcinoma cell line		hypodiploid; modal number = 45; a large submetacentric chromosome was present in all cells			RRID:CVLL_1050	300106
786-O <sup>1</sup>	Human Renal cell adenocarcinoma cell line	CAIX +	Hypertriploid; Y was present in 60% of cells examined			RRID:CVCL_1051	300107
A-498 <sup>2</sup>	Human Kidney Carcinoma cell line	PGM3, 1; PGM1, 1-2; ES-D, 2; Me-2, 1; AK-1, 1; GLO-1, 2; G6PD, B;	Bimodal; tetraploidy			RRID:CVCL_1056	300113
A-704 <sup>2</sup>	Human adenocarcinoma cell line	Me-2, 1; PGM3, 1-2; PGM1, 1; ES-D, 1; AK-1, 1; GLO-1, 2; G6PD, B	(P59) diploid to hyperdiploid, hypertriploid to hypertetraploid with abnormalities including breaks, dicentrics and endoreduplication			RRID:CVCL_1065	300217
ACHN <sup>3</sup>	Human adenocarcinoma cell line	CAIX <sup>-</sup>			p53 positive	RRID:CVCL_1067	300117
CaKi-1 <sup>4</sup>	Human Clear cell carcinoma cell line					RRID:CVCL_0234	300149
CaKi-2 <sup>4</sup>	Human Clear cell carcinoma cell line	Me-2, 1; PGM3, 1; PGM1, 1; ES-D, 1; AK-1, 1; GLO-1, 1-2; G6PD, B; Phenotype Frequency Product: 0.0511	(P8) hypopentaploid to hypohexaploid (+A2, +A3, +B, +C, +D, +F, +G, -A) with abnormalities including dicentrics, acrocentric fragments, minutes, breaks, and large subtelocentric markers			RRID:CVCL_0235	300140
HEK293 <sup>5</sup>	Human Kidney Carcinoma Cell Line			transformed with adenovirus 5 DNA	Vitronectin, CEA negative, p53 positive	RRID:CVCL_0045	300192
RCC-ER (KTCTL- 13) <sup>6</sup>	Human clear cell renal cell carcinoma cell line			IL8 RS1126647 3-UTR Wt	p53 positive, Cytokeratine positive 8,18,19, vimentin	RRID:CVCL_5870	300238
RCC-FG1 (KTCTL- 26) <sup>6</sup>	Human clear cell renal cell carcinoma cell line			IL8 RS1126647 3-UTR SNP A>T	HLA-A2 negative; cytokeratine 8+, 18+, 19+; vimentin+	RRID:CVCL_5872	300248

Name of cell line	Cell type	Cell Marker	Karyotype	Genotype	Secretion of Products	Ref ID in Cellosaurus <sup>10</sup>	CLS order no.
RCC-FG2 (KTCTL- 26A) <sup>6,7</sup>	Human clear cell renal cell carcinoma cell line	CAIX -/+	47,X,-Y,del(2)(p21),del(3)(p14),t(3;13)(p23;q32),+5,+7,der(9)t(5;9)(:q15->q33:p22),+16,-21,-22	IL8 RS1126647 3-UTR SNP A>T	cytokeratin 8+,18+,19+; vimentin	RRID:CVCL_5873	300249
RCC-GH	Human clear cell renal cell carcinoma cell line			IL8 RS1126647 3-UTR SNP A>T		RRID:CVCL_5874	300252
RCC-GS (KTCTL-185)	Human clear cell renal cell carcinoma cell line			IL8 RS1126647 3-UTR SNP T>T	8, 18, 19, vimentin	RRID:CVCL_5875	300241
RCC-HB (KTCTL- 48)	Human clear cell renal cell carcinoma cell line			IL8 RS1126647 3-UTR SNP T>T	p53 negative, Cytokeratine 8, 18, 19, vimentin	RRID:CVCL_5877	300253
RCC-JF (KTCTL-140)	Human clear cell renal cell carcinoma cell line			IL8 RS1126647 3-UTR SNP T>T		RRID:CVCL_5879	300274
RCC-JW (KTCTL-195)	Human clear cell renal cell carcinoma cell line			IL8 RS1126647 3-UTR Wt	cytokeratine 8, 18, 19, vimentin	RRID:CVCL_5880	300244
RCC-KL	Human clear cell renal cell carcinoma cell line			IL8 RS1126647 3-UTR SNP A>T		RRID:CVCL_5881	300281
RCC-KP (KTCTL-53)	Human clear cell renal cell carcinoma cell line			IL8 RS1126647 3-UTR Wt		RRID:CVCL_5882	300254
RCC-LR (KTCTL-120)	Human clear cell renal cell carcinoma cell line			IL8 RS1126647 3-UTR Wt	Cytokeratine 8, 18, 19, vimentin	RRID:CVCL_5883	300236
RCC-MF (KTCTL-1M) <sup>8</sup>	Human clear cell renal cell carcinoma cell line	CAIX+		IL8 RS1126647 3-UTR SNP T>T	G250 +, p53 +, Cytokeratine 8+,18+,19+; Vimentine	RRID:CVCL_5884	300245
RCC-MH (KTCTL-129)	Human clear cell renal cell carcinoma cell line	HLA-A2 negative		IL8 RS1126647 3-UTR Wt	Cytokeratine 8, 18, 19, vimentin	RRID:CVCL_5885	300237
RCC-OF1 (KTCTL-54)	Human clear cell renal cell carcinoma cell line			IL8 RS1126647 3-UTR SNP T>T		RRID:CVCL_5886	300255
RCC-PR	Human clear cell renal cell carcinoma cell line			IL8 RS1126647 3-UTR SNP A>T		RRID:CVCL_5887	300267
RCC-WK (KTCTL-87)	Human clear cell renal cell carcinoma cell line			IL8 RS1126647 3-UTR SNP A>T		RRID:CVCL_5888	300243
WT-CLS1 <sup>9</sup>	Human primary Wilms' tumor cell line			WT1 mutation status: wild type; CTNNB1 mutation status: wild type; no LOH.		RRID:CVCL_5904	300379

Information on cell culture conditions, authentication data and others can be found on the website: [www.clsgmbh.de](http://www.clsgmbh.de)

#### References:

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11. <http://web.expasy.org/cellosaurus/> - the cellosaurus represents a detailed data collection bank of a plethora of cell line relevant data from various cell banks.

All of the products listed in Table 1/Table 2 are intended for research use only, not for use in human, therapeutic or diagnostic applications.

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