

## Panel of various Animal cell lines (except mouse and rat)

Part of the CLS cell bank

CLS Cell Lines Service



Table 1: Animal cell lines: Origin and General Characteristics							
Name of cell line	Cell type	Organism / Strain	Stage / Gender	Tissue / Disease	Morphology	Growth properties	CLS order no.
<b>Bovine (Bos Taurus)</b>							
MDBK <sup>1</sup>	Bovine Kidney cell line	Bovine (Bos Taurus)	Adult / Male	Kidney (normal)	Epithelial	Monolayer, adherent	600396
<b>Dog (Canis familiaris)</b>							
A-72 <sup>2</sup>	Dog carcinoma cell line	Canine Golden retriever	8 years / Female	Tumor cancer (unknown)	Fibroblast	Monolayer, adherent	602398
MDCK <sup>3</sup>	Madin-Darby-Canine-Kidney cell line	Canine Cocker spaniel	Adult / Female	Madin-Darby-Canine-Kidney	Epithelial	Monolayer, adherent	602280
<b>Hamster (Mesocricetus auratus)</b>							
BHK-21 [clone13] <sup>4</sup>	Hamster Kidney Fibroblastoid cell line	Hamster Syrian golden	Newborn	Baby-Hamster-Kidney (normal)	Fibroblastoid	Monolayer, adherent	603126
CHO <sup>5</sup>	Chinese Hamster Ovary cell line	Hamster Chinese	Adult / Female	Ovary	Epithelial	Monolayer, adherent	603479
CHO-K1 <sup>5</sup>	Chinese Hamster Ovary cell line	Hamster Chinese	Adult / Female	Ovary	Epithelial	Monolayer, adherent	603480
LS-CLS <sup>6</sup>	Hamster Hematopoiesis Lymphosarcoma cell line	Hamster Syrian golden	Adult	Lymphosarcoma	Round cells	Suspension	603390
V79-4 <sup>7</sup>	Hamster lung fibroblast cell line	Hamster Chinese		Lung	Fibroblast	Monolayer, adherent	603371
<b>Chicken (Gallus gallus)</b>							
LMH <sup>8</sup>	Chicken Liver Hepatocellular carcinoma cell line	<b>Chicken (Gallus gallus)</b> Leghorn	Male	Liver, Hepatocellular carcinoma	Epithelial; Dendritic like	Monolayer, adherent	601411
MDCC-MSB1 <sup>9</sup>	Chicken Lymphoblast cell line	Chicken (Gallus gallus)		Lymphoblast	Round cells	Suspension	601413
<b>Insect (Spodoptera frugiperda)</b>							
Sf9 <sup>10</sup>	Insect Ovary cell line	Insect fall armyworm	Pupa / Female	Ovary	Round, attached, epitheloid	Monolayer, adherent	604328

Name of cell line	Cell type	Organism / Strain	Stage / Gender	Tissue / Disease	Morphology	Growth properties	CLS order no.
<b>Opossum (<i>Didelphis marsupialis virginiana</i>)</b>							
OK <sup>10</sup>	Opossum Kidney cell line	Opossum	Adult / Female	Opossum Kidney, proximal tubule; normal	Epithelial	Monolayer, adherent	606465
<b>Pig (<i>Sus scrofa</i>)</b>							
LLC-PK1 <sup>14</sup>	Pig Kidney cell line	Sus scrofa Hampshire	3 to 4 weeks / Male	Kidney, normal	Epithelial	Monolayer, adherent	607264
PK-15 <sup>15</sup>	Pig Kidney cell line	Sus scrofa		Kidney, normal	Epithelial	Monolayer, adherent	607426
<b>Potoroo (<i>Potorous tridactylis</i>)</b>							
Ptk-1 <sup>12</sup>	Potoroo Kidney cell line	Potoroo Kangaroo rat	Adult / Female	Kidney, normal	Epithelial	Monolayer, adherent	608393
Ptk-2 <sup>13</sup>	Potoroo Kidney cell line	Potoroo Kangaroo rat	Adult / Male	Kidney, normal	Epithelial	Monolayer, adherent	608316

**Murine** and **rat** cell lines have been listed separately:

Panel Murine Tumor cell lines

Panel Rat Tumor cell lines

may be downloaded from <https://www.clsgmbh.de/vorlage.php?vorlage=documents>

**Table 2: Animal cell lines: Special Features**

Name of cell line	Cell type	Karyotype	Virus Resistance	Virus Susceptibility	Secretion of products	Ref ID in Cellosaurus <sup>16</sup>	CLS order no.
<b>Bovine (Bos Taurus)</b>							
MDBK <sup>1</sup>	Bovine Kidney cell line		Virus Resistance Poliovirus 2	Vesicular stomatitis (Indiana); infectious bovine rhinotracheitis virus; bovine parvovirus; bovine adenovirus I, III; bovine viral diarrhea viruses; parainfluenzavirus 3	Keratin Reverse Transcriptase: neg	RRID:CVLL_0421	600396
<b>Dog (Canis familiaris)</b>							
A-72 <sup>2</sup>	Dog carcinoma cell line			Canine coronaviruses; canine adenovirus I, II; canine herpes viruses; canine parainfluenzavirus; canine parvovirus canine distemper virus; minute virus of canines		RRID:CVLL_3453	602398
MDCK <sup>3</sup>	Madin-Darby-Canine-Kidney cell line		Poliovirus 2; coxsackievirus B3, B4	Vesicular stomatitis (Indiana); vaccinia; coxsackievirus B5; reovirus 2, 3; adenovirus 4, 5; vesicular exanthema of swine; infectious canine hepatitis	Keratin Reverse Transcriptase: neg	RRID:CVLL_0422	602280
<b>Hamster (Mesocricetus auratus)</b>							
BHK-21 [clone13] <sup>4</sup>	Hamster Kidney Fibroblastoid cell line		Poliovirus 2	Adenovirus 25; herpes simplex; reovirus 3; vesicular stomatitis (Indiana)	Reverse Transcriptase: neg	RRID:CVLL_1915	603126
CHO <sup>5</sup>	Chinese Hamster Ovary cell line					RRID:CVLL_0213	603479
CHO-K1 <sup>5</sup>	Chinese Hamster Ovary cell line					RRID:CVLL_0214	603480
LS-CLS <sup>6</sup>	Hamster Hematopoiesis Lymphosarcoma cell line					RRID:CVLL_5789	603390

Name of cell line	Cell type	Karyotype	Virus Resistance	Virus Susceptibility	Secretion of products	Ref ID in Cellosaurus <sup>16</sup>	CLS order no.
<b>Hamster (<i>Mesocricetus auratus</i>)</b>							
V79-4 <sup>7</sup>	Hamster lung fibroblast cell line	Modal number = 22; range = 20 to 23 Pseudodiploid markers. No X and Y but a single Xq.				RRID:CVLL_2796	603371
<b>Chicken (<i>Gallus gallus</i>)</b>							
LMH <sup>8</sup>	Chicken Liver Hepatocellular carcinoma cell line	triploid; modal number = 116; six marker chromosomes			Receptors : Estrogen (low level expression). Released factors: glucose-6-phosphatase; canalicular ATPase activity (weak)	RRID:CVLL_2580	601411
MDCC-MSB1 <sup>9</sup>	Chicken Lymphoblast cell line					RRID:CVLL_4542	601413
<b>Insect (<i>Spodoptera frugiperda</i>)</b>							
Sf9 <sup>10</sup>	Insect Ovary cell line			Baculoviruses; Autographa californica (MNPV); St. Louis encephalitis (SLE)		RRID:CVLL_0549	604328
<b>Opossum (<i>Didelphis marsupialis virginiana</i>)</b>							
OK <sup>11</sup>	Opossum Kidney cell line				Receptors Expressed: alpha2-adrenergic; serotonin; parathyroid hormone; atrial natriuretic factor	RRID:CVLL_0472	606465
<b>Pig (<i>Sus scrofa</i>)</b>							
LLC-PK1 <sup>14</sup>	Pig Kidney cell line				Plasminogen activator	RRID:CVLL_0391	607264
PK-15 <sup>15</sup>	Pig Kidney cell line		Poliovirus 2	hog cholera; African swine fever; vesicular exanthema of swine; foot and mouth disease (FMDV); vesicular stomatitis (Indiana); vaccinia; reovirus 2, 3; adenovirus 4, 5; coxsackievirus B2, B3, B4, B5, B6	Plasminogen activator; Keratin Reverse Transcriptase: neg	RRID:CVLL_2160	607426

Name of cell line	Cell type	Karyotype	Virus Resistance	Virus Susceptibility	Secretion of products	Ref ID in Cellosaurus <sup>16</sup>	CLS order no.
<b>Potoroo (<i>Potorous tridactylis</i>)</b>							
Ptk-1 <sup>12</sup>	Potoroo Kidney cell line		Poliovirus 2	vesicular stomatitis (Indiana)	Keratin Reverse Transcriptase: neg	RRID:CVLL_0489	608393
Ptk-2 <sup>13</sup>	Potoroo Kidney cell line		Adenovirus 5; coxsackievirus B5; poliovirus 2	Coxsackievirus A9; herpes simplex; vaccinia; vesicular stomatitis (Ogden)	Keratin Reverse Transcriptase: neg	RRID:CVLL_0514	608316

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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15. Pirtle EC. Variation in the modal chromosome number of two PK-15 porcine kidney cell lines. Am J Vet Res 27: 747-9, 1966.
16. <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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