



ARC - Assay Ready Cells



Recombinant cell lines expressing human ion channels for cardiac safety testing and other applications have been developed by B'SYS as well as the Steinbeis Innovation Center together with NMI TT. The cell lines are licensed by acCELLerate for the preparation of Patch Ready Cells which can be used instantly after thawing for automated and manual patch clamp set-ups and do not need to be cultivated before. The cells are provided in single-use aliquots of cryopreserved cells at 5 million cells/vial and come with suitable amounts of recovery and patch buffer.

PATCH READY ION CHANNEL CELL LINES (by B'SYS Switzerland)

cell line	application	catn° (pack)	unit
CHO-Kir2.1 (KCNJ2)	cardiac safety testing CIPA	RE301 (1/5)	vial @ 5E6 cells
CHO-K _v 4.3/KChIP2 (KCND3 KCNIP2)	cardiac safety testing CIPA	RE302 (1/5)	vial @ 5E6 cells
CHO-K _v LQT1-minK (KCNQ1 KCNE1)	cardiac safety testing CIPA	RE303 (1/5)	vial @ 5E6 cells
CHO-hERG-DUO (KCNH2)	cardiac safety testing CIPA	RE304 (1/5)	vial @ 5E6 cells
CHO-Na _v 1.5-DUO (SCN5A)	cardiac safety testing CIPA	RE305 (1/5)	vial @ 5E6 cells
CHO-Ca _v 1.2 (CACN-A1C, -B2, -A2D)	cardiac safety testing CIPA	RE306 (1/5)	vial @ 5E6 cells
HEK Na _v 1.4 (SCN4A)	skeletal muscle excitability	RE307 (1/5)	vial @ 5E6 cells

assay.works

acCELLerate distributes a growing list of recombinant target expressing cell lines provided by Assay.Works. The cell lines cover a board range of pharmaceutically relevant transmembrane proteins (GPCR's ion channels transporter) generically used for small molecule compound screening, lead identification and selectivity testing. The cells are provided in assay-ready format at 10 million cells/vial and can be used instantly after thawing. Recovery buffer and assay medium are provided with the cells.

LIGAND GATED ION CHANNEL CELL LINES (by assay works GmbH Germany)

cell line	application	catn° (pack)	unit
CHO-huTRPA1	Pain, itch, respiratory diseases	AW210 (5/25)	vial @ 1E7 cells
CHO-huTRPM8	cancer	AW220 (5/25)	vial @ 1E7 cells
CHO-huTRPV1	pain	AW230 (5/25)	vial @ 1E7 cells
CHO-huTRPV3	pain, itch	AW240 (5/25)	vial @ 1E7 cells
CHO-huTRPV4	cough asthma cancer pulmonary edema	AW250 (5/25)	vial @ 1E7 cells

EUROPEAN OFFICE

US OFFICE

+49 (160) 987 577 56

please@accellerate.me

+1 (732) 698 34 04

acCELLerate GmbH
Osterfeldstraße 12-14
22529 Hamburg - Germany

www.accellerate.me

acCELLerate GmbH
400 Route 518
Skillman, NJ 08558 - USA

LIGAND GATED ION CHANNEL CELL LINES (by assay works GmbH Germany)

cell line	application	catn° (pack)	unit
1321N1-huP2RX2	hearing, perception of taste, peristalsis	AW260 (5/25)	vial @ 1E7 cells
HEK293-huP2RX7	pain, cancer	AW270 (5/25)	vial @ 1E7 cells
1321N1-huP2RX1	male reproductive function	AW280 (5/25)	vial @ 1E7 cells
1321N1-huP2RX3	pain, taste	AW290 (5/25)	vial @ 1E7 cells
1321N1-huP2RX4	cardiac function, ATP-mediated cell death	AW300 (5/25)	vial @ 1E7 cells



Human and animal Assay Ready Cells have been developed to release researchers from preparatory cell culture work and to gain flexibility their experiments. The cells are cryopreserved at a highly functional state and can be used instantly like a reagent e.g. for proliferation assay or target engagement testing. Cell line identity and the absence of cross contaminations have been verified by STR analysis and species marker PCR. The cell lines are licenses from CLS Cell Lines Service and provided in assay ready single-use aliquots of 10 million cells. All cells come with recovery buffer and assay medium.

HUMAN CELL LINES (by CLS Cell Lines Service Germany)

cell line	application	catn° (pack)	unit
HL-60 promyelocytic leukemia (blood)	Immune system disorder research	RE501 (05/25)	vial @ 1E7 cells
Jurkat T-cell leukemia (blood)	transfection	RE504 (05/25)	vial @ 1E7 cells
K-562 CML (blood)	Immune system disorder research	RE505 (05/25)	vial @ 1E7 cells
NB-4 promyelocytic leukemia (blood)	cancer research	RE508 (05/25)	vial @ 1E7 cells
TF-1 erythroleukemia (blood)	EPO potency NGF potency	RE509 (05/25)	vial @ 1E7 cells
THP-1 monocytic leukemia (blood)	h-CLAT pyrogen detection (MAT)	RE510 (05/25)	vial @ 1E7 cells
U-937 monocytic leukemia (blood)	U-Sens (skin sensitization)	RE511 (05/25)	vial @ 1E7 cells
L5178y mouse lymphoma (blood)	mutagenicity genotoxicity	RE513 (05/25)	vial @ 1E7 cells
U-2-OS osteosarcoma (bone)	transfection	RE525 (05/25)	vial @ 1E7 cells
MCF-7 mammary carcinoma (breast)	estrogenic activity	RE544 (05/25)	vial @ 1E7 cells
HepG2 hepatoma (liver)	hepatotoxicity	RE561 (05/25)	vial @ 1E7 cells
Huh7 hepatoma (liver)	virus production	RE562 (05/25)	vial @ 1E7 cells
HCT116 carcinoma (colon)	high-throughput screening, cancer	RE563 (05/25)	vial @ 1E7 cells
HaCat normal keratinocyte (skin)	cytotoxicity skin, irritation	RE570 (5/25)	vial @ 1E7 cells
A-431 melanoma (skin)	3D cell culture, toxicology	RE573 (05/25)	vial @ 1E7 cells
A-549 epithelial carcinoma (lung)	viruscide testing	RE582 (05/25)	vial @ 1E7 cells

ANIMAL CELL LINES (by CLS Cell Lines Service Germany)

cell line	application	catn° (pack)	unit
VERO monkey kidney	virucide testing virus amplification	RE750 (05/25)	vial @ 1E7 cells
MDCK canine kidney	permeability transporter	RE752 (05/25)	vial @ 1E7 cells
B16 mouse melanoma	melanin production cytotoxicity	RE771 (05/25)	vial @ 1E7 cells
L-929 mouse skin fibroblast	biocompatibility TNF α potency	RE772 (05/25)	vial @ 1E7 cells
V79 hamster lung fibroblast	mutagenicity genotoxicity	RE781 (05/25)	vial @ 1E7 cells
CHO-K1 hamster ovary	transfection	RE782 (05/25)	vial @ 1E7 cells
C2C12 mouse myoblast	myogenic differentiation	RE784 (05/25)	vial @ 1E7 cells
3T3-L1 mouse fibroblast	adipogenic differentiation	RE785 (05/25)	vial @ 1E7 cells
NIH-3T3 mouse fibroblast	cytotoxicity	RE786 (05/25)	vial @ 1E7 cells



Kidney epithelial cells from the proximal part of the tubulus are an essential tool to specifically assess nephrotoxicity *in vitro*. ciPTEC cells are conditionally immortalized proximal tubular epithelial cells with reconstituted organic anion transporters (OAT1 and OAT3) developed by the Radboud University Nijmegen (NL). The cells are provided by acCELLerate in a fully differentiated state in single use aliquots of 1 million cells/vial with suitable amounts of recovery buffer and assay medium. Upcyte cells have been developed to give researchers the opportunity to work with cells which closely resemble the *in vivo* situation. The cells are brought back into proliferation without altering their most relevant tissue-specific characteristics such as transporters or enzyme activities.

Expanded Primary Cells (by Cell4Pharma, Netherlands; upcyte and acCELLerate, Germany)

cell line	application	catn° (pack)	unit
upcyte Hepatocytes	hepatotoxicity	UC010 (1/5)	vial @ 5E6 cells
upcyte LSECs	hepatotoxicity	UC065 (1/5)	vial @ 2E6 cells
ciPTEC 14.4 (parental)	nephrotoxicity testing, transporter studies	RE421 (1/5)	vial @ 5E6 cells
ciPTEC-OAT1	nephrotoxicity testing, transporter studies	RE422 (1/5)	vial @ 5E6 cells
ciPTEC-OAT3	nephrotoxicity testing, transporter studies	RE423 (1/5)	vial @ 5E6 cells
huKERA-12	cytotoxicity, skin irritation	RE671 (5/25)	vial @ 1E7 cells



Chemical and cosmetic ingredients must be tested *in vitro* for their potential of skin sensitization. One of the mechanisms assessed, is the activation of the antioxidant response pathway and Nrf-2 activation in human skin keratinocytes. Two recombinant luciferase reporter cell lines have been developed and validated for this purpose KeratinoSens[®] by Givaudan and LuSens by BASF (OECD TG 442D). The cells are distributed by acCELLerate both as a cell line for further cultivation and in assay-ready format for direct assay use after thawing.

ARE/Nrf2 LUCIFERASE REPORTER CELLS (by Givaudan, Switzerland and BASF, Germany)

cell line	application	catn° (pack)	unit
KeratinoSens [®] (assay-ready)	skin sensitization	RE232 (5)	vial @ 5E6 cells
LuSens (assay-ready)	skin sensitization	RE234 (5)	vial @ 5E6 cells
KeratinoSens [®] (cell line)	skin sensitization	RE242 (1)	vial @ 5E6 cells
LuSens (cell line)	skin sensitization	RE244 (1)	vial @ 5E6 cells

instaCELL Bioassay Kits



InstaCELL bioassay kits have been designed to improve the reliability and reproducibility of routine testing. The assay kits include aliquots of cryopreserved Assay Ready Cells which have been qualified for the testing. The cells can be used like a reagent instantly after thawing and don't need to be cultivated or even counted before. The kits further include all necessary buffers and media, assay plates, proper controls, and readout reagents.

instaCELL BIOASSAY KITS (by acCELLerate)

cell line	application	catn° (pack)	unit
instaCELL Cytotoxicity Assay Kit	toxicology	SF020 (1)	1 kit
instaCELL Micronucleus Assay Kit	genotoxicity, mutagenicity	SF120 (1)	1 kit
instaCELL Phospholipidosis Assay Kit	phospholipidosis, steatosis	SF130 (1)	1 kit
instaCELL Biocompatibility Assay Kit	biocompatibility of medical devices	SF180 (1)	1 kit
instaCELL KeratinoSens Assay Kit	skin sensitization	SF220 (1)	1 kit

All information are subject to change.

All products are not to be used in humans or for diagnostic purposes.

KertinoSens® is a registered trademark of Givaudan

KertinoSens® and LuSens include technology which is patented by Promega under U.S. Pat. No. 8008006 and EU Pat. No. 1341808B1. The cells may only be used under the terms of a limited use license.

upcyte® is a registered trademark of upcyte technologies GmbH

instaCELL® is a registered trademark of acCELLerate GmbH

