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Universiteit Leiden



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Author: Braak, Bas ter

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List of abbreviations

◀ IN THE PICTURE

-150 °C freezer. In this PhD-research many different cell lines have been used, some genetically modified and others even have been isolated and generated. Cells can be put in small tubes (with coloured lids) and cryo-preserved for many years in these special freezers. DMSO will prevent the water from forming ice crystals and damaging the cells. Fog coming from the freezer is water vapour condensing due to the drop in temperature.

◀ IN BEELD

-150 °C vriezer. Gedurende deze PhD zijn veel verschillende cellijnen gebruikt, genetisch gemodificeerd en anderen zelfs geïsoleerd en gemaakt. Deze cellen kunnen voor jaren in leven worden gehouden door ze in de kleine buisjes (met gekleurde dopjes) te doen en ze heel koud te bewaren. DMSO zorgt ervoor dat er geen waterkristallen gevormd worden die de cellen kunnen beschadigen. De mist die uit de vriezer komt is waterdamp dat direct condenseert.

List of abbreviations

AKT	Serine/threonine kinase
BC	Breast Cancer
BSA	Bovine serum albumin
CDFBS	Charcoal dextran treated FBS
DEG	Differentially expressed gene
DM	Diabetes mellitus
DM1	DM type 1
DM2	DM type 2
DMSO	Dimethyl sulfoxide
DNA	Deoxyribonucleic acid
EC	Endogenous control
EC50	Effective concentration 50%
EGFR	Epidermal growth factor receptor
EMT	Epithelial-to-mesenchymal transition
ER	Estrogen receptor
ERK	Extracellular signal regulated kinase
ESM	Electronic supplementary material
FACS	Fluorescence-activated cell sorting
FBS	Fetal bovine serum
FDR	False discovery rate
GEM	Genetically engineered mouse
H&E	Hematoxylin and eosin
HER2	Human epidermal growth factor receptor 2
HR	Hazard ratio
HRP	Horseradish peroxidase
IF	Immunofluorescence
IGF	Insulin like growth factor
IGF1R	IGF-1 receptor
IGFBP	IGF binding protein
IHC	Immuno histo chemistry
INSR	Insulin receptor
IPA®	Ingenuity pathway analysis
IRA	A isoform of IR
IRB	B isoform of IR
IRR	Incidence rate ratio

IRS-1	IR substrate 1
IU	International unit
KD	Knock-down
KM	Kaplan Meier
KO	Knock-out
KS	Kolmogorov-Smirnov
M1	First metabolite of Glargine
M2	Second metabolite of Glargine
MAPK	Mitogen activated protein kinases
MET	Mesenchymal-to-epithelial transition
MeV	Multi-experiment viewer
MG	Mammary gland
MILP	Mixed integer linear programming
MPD	Maximal pharmacological dose
mRNA	messenger RNA
MTD	Maximal tolerance dose
MTLT	Mammary gland tumor latency time
mTOR	Mechanistic target of rapamycin
NGS	Next generation sequencing
NIAD	Non-insulin anti-diabetic drug
NPH	Neutral protamine Hagedorn
PBS	Phosphate buffered saline
PI3K	Phosphatidylinositol 3-kinase
PR	Progesterone receptor
PTEN	Phosphatase and tensin homolog
RCT	Randomized controlled trial
RNA	Ribonucleic acid
SD	Standard deviation
SEM	Standard error of mean
shRNA	Short hairpin RNA
siRNA	Small interfering RNA
SNP	Single nucleotide polymorphism
SRB	Sulforhodamine B
WAP	Whey acidic protein
WB	Western blot
Wt	Wild type
X10	Insulin AspB10

