JLR Standard Abbreviations

PART 1

Any cell line abbreviations or breed crosses

Study acronyms-text should make clear the acronym is that of a study at first mention

BODIPY

DAPI

RPMI

15d-PGJ_2

1Q21-1Q23 (no space)

AM, PM (Capitals)

e.g., i.e.,

ED_{50}, LD_{50}

energy terms: ΔG, ΔH

FLAG-epitope

g

H & E; H&E

ia, im, ip, iv, icv (intracerebroventricular), po, sc

nt –327 and –314 (nt = nucleotide; minuses)

nt, nucleotide

Pk_a (and PK_b), negative log of the dissociation constant

R, *S*

USA, US, UK, NY, USDA

Use % for "percent"

v/v (for volume/volume). Exs.: 2:1 (v/v) extraction; 60:40:4 (v/v/v).

vs. (only in parentheses; spell out in text)

~70%

PART 2

2D, 3D two-dimensional, three-dimensional

Ab	antibody
ABCA1, etc.	ATP binding cassette transporter A1, G1, etc.
ACAT	acyl-CoA:cholesterol acyltransferase
ADP	adenosine 5′-diphosphate [and similarly for cytidine (CDP), guanosine (GDP), inosine (IDP), uridine (UDP), xanthosine (XDP), thymidine (TDP)], all nucleotides
AMP, etc.	adenosine 5′-monophosphate, cytidine monophosphate (CMP), etc.
ATP, etc.	adenosine 5′-triphosphate, CTP, etc.
ATPase, etc.	adenosine 5′-triphosphatase, CTPase, etc.
apo, Apo, APO, etc.	apolipoprotein
ATCC	American Type Culture Collection
BCA	bicinchoninic acid
BMI	body mass index
bp	base pair(s)
BSA	bovine serum albumin
cAMP, etc.	adenosine 3′,5′-cyclic monophosphate, etc.
CD	circular dichroism
cDNA	complementary DNA
CHAPS	3-(3-cholamidopropyl)diethyl-ammonio-1 propanesulfonate
CNS	central nervous system
CoA and	coenzyme A and its acyl derivatives: acyl-CoA
CPM/cpm	counts per minute
CVD	cardiovascular disease
Da	Dalton*. Non-SI unit of mass (symbol Da) that is identical to the unified atomic mass unit.
DEAE	diethylaminoethyl
DIDS	4,4′-diisothiocyanatostilbene-2,2′-disulfonic acid
DHA	docosahexaenoic acid
DMEM	Dulbecco’s modified Eagle’s medium

DMSO dimethyl sulfoxide

DNA deoxyribonucleic acid

DNase deoxyribonuclease

DTNB 5,5′-dithiobis(2-nitrobenzoic acid)

DTT dithiothreitol

e exponential

EC_{50} concentration giving half-maximal response (also ED, LD)

ECL enhanced chemiluminescence

EDTA ethylenediaminetetraacetic acid

EGTA ethylene glycol-bis(β-aminoethyl ether)- *N*,*N*,*N*',*N*'-tetraacetic acid

EI electron ionization*.

ELISA enzyme-linked immunosorbent assay

eNOS endothelial nitric-oxide synthase

EPA eicosapentaenoic acid

ER endoplasmic reticulum

ERK extracellular signal-regulated kinase

ESI electrospray ionization*

ESR electron spin resonance

FA fatty acid

FAS, FASN fatty acid synthase

FBS, FCS fetal bovine serum, fetal calf serum

FFA free fatty acid

FITC fluorescein isothiocyanate

FXR farnesoid X receptor

GC/MS gas chromatography-mass spectrometry

GAPDH glyceraldehyde-3-phosphate dehydrogenase

gd gestational day

GFP green fluorescent protein

GSH, GSSG reduced and oxidized glutathione

HBSS Hanks' balanced salt solution

HDL, HDL-C high density lipoprotein, high density lipoprotein-cholesterol

HETE hydroxyeicosatetraenoic acid

HL hepatic lipase

HEPES *N*-2-hydroxyethylpiperazine-*N*'-2-ethanesulfonic acid

HMG-CoA 3-hydroxy-3-methylglutaryl-CoA

HODE hydroxyoctadecadienoic acid

HPLC high-performance liquid chromatography

HRP horseradish peroxidase

IACUC Institutional Animal Care and Use Committee

IC_{50} concentration giving half-maximal inhibition

IDL intermediate density lipoprotein

IgG, etc. immunoglobulin G, etc.

IFN interferon

IPTG Isopropyl-β,D-thiogalactopyranoside

kb or Kb kilobase(s)

K_m Michaelis-Menten constant

KO knockout

LCAT lecithin:cholesterol acyltransferase

LC/MS(/MS) liquid chromatography mass spectrometry

LDL, LDL-C low density lipoprotein, low density lipoprotein-cholesterol

LPL lipoprotein lipase ["LPL" cannot be used for "lysophospholipid"; use "lyso-PL" instead].

LXR liver X receptor

MALDI Matrix-assisted laser desorption/ionization*

MAPK mitogen-activated protein kinase

MEM Eagle's minimum essential medium

MES 2-(*N*-morpholino)ethanesulfonic acid

Mops 3-(*N*-morpholino)propanesulfonic acid

MRI magnetic resonance imaging

MS mass spectrometry (also MS/MS, tandem mass spectrometry, is standard)

MS^n multi-stage MS; may appear MS^2, MS^3, etc.

MUFA monounsaturated fatty acid

m/z	mass-to-charge ratio, from mass spectral data
NAD	nicotinamide adenine dinucleotide
NADH	reduced nicotinamide adenine dinucleotide
NADP	nicotinamide adenine dinucleotide phosphate
NADPH	reduced nicotinamide adenine dinucleotide phosphate
NCBI	National Center for Biotechnical Information
NEFA	nonesterified fatty acid
NF-κB	nuclear factor-κB
NMR	nuclear magnetic resonance
NO	nitric oxide
OCT	optimum cutting temperature
PAGE	Polyacrylamide gel electrophoresis
PBS	phosphate-buffered saline
PCR	polymerase chain reaction
PIPES	piperazine-*N*-*N*'-bis(2-ethanesulfonic acid)
PMA	phorbol myristate acetate
PMSF	phenylmethylsulfonyl fluoride
POPC	palmitoyloleoyl phosphatidylcholine
PPAR	peroxisome proliferator-activated receptor
PUFA	polyunsaturated fatty acid
PVDF	polyvinylidene difluoride
Rf	retention factor
RIA, RIPA	radioimmunoassay, radioimmunoprecipitation assay
RNA	ribonucleic acid [messenger RNA (mRNA), rRNA, nuclear RNA (nRNA), ribosomal RNA (rRNA), transfer RNA (tRNA), small interfering RNA (siRNA), short hairpin RNA (shRNA)]
RNase	ribonuclease
RT	reverse transcriptase
RT-PCR	reverse transcription polymerase chain reaction
SDS-PAGE	sodium dodecyl sulfate polyacrylamide gel electrophoresis

SITS	4-acetamido-4’-isothiocyanatostilbene-2-2’-disulfonic acid
SM	sphingomyelin
SMase	sphingomyelinase
SNP	single nucleotide polymorphism
SREBP	sterol regulatory element-binding protein
T2D	type 2 diabetes (T1D also)
TBS	Tris-buffered saline
TLC	thin-layer chromatography
TMS	trimethylsilyl
TNF	tumor necrosis factor
TOF	time-of-flight
Tris	tris(hydroxymethyl)aminomethane
TUNEL	terminal deoxyribonucleotidyl transferase-mediated dUTP nick-end labeling
u	Unified atomic mass unit*
UV	ultraviolet
VLDL	very low density lipoprotein
V_{max}	maximum velocity
WT	wild type

*Standard definitions of terms relating to mass spectrometry (IUPAC Recommendations 2006).

JLR Measurement Abbreviations

Units, general

μg (microgram)

10^{-9} M (superscript minus; cap M)

5–100 ng/ml

Da (Dalton, molecular mass)

absorbance (*A*)

ångström (Å)

ampere (A)

atomic mass unit (amu)

base pair (bp)

becquerel (Bq)

centimeter (cm)

centimorgan (cM)

counts per minute (cpm)

curie (Ci)

disintegrations per minute (dpm)

farad (F)

gram (g)

IU

“kilo” is always lowercase

kilobases (kb)

kilodalton (kDa) Molecular mass; but not molecular weight, which has no units. Change kD to kDa always.

kilovolts (kV)

l = liter (lowercase “ell” instead of cap). Please spell out “liter” if that is the only unit, e.g., 2 liters, but 2 mg/l

logarithm to the base e (ln)

logarithm to the base 10 (log)

Mb (megabase)

MJ (megajoules)

mer (measurement relating to amino acids)

meter (m)

cubic meter (m^3)

micron (μm)

milligram (mg)

milliliter (ml)

millimeter (mm)

millivolt (mV)

mmol (millimole)

molar (M)

mole percent (mol%)

mole (mol)

normal (N)

nanometer (nm)

nanomole (nmol)

nucleotide (nt)

ohm (Ω)

parts per minute (ppm)

picometer (pm)

revolutions per minute (rpm) [Do not allow in cases of centrifugation; query author to use g-force (see *g* in top section).]

unit(s) (U [e.g., 100 U/ml penicillin]; spell out when used by itself [e.g., 2 units whole blood…])

volt (V)

volume (vol)

Statistics

ANOVA, ANCOVA

CI = confidence interval (used with a percentage; e.g., 95% CI, and expressed as a range or with upper and lower limits: 1.0, 1.6)

LOD = limit of detection

LOO = logarithm of odds

Mann-Whitney *U* test

P (probability; uppercase, italic)

$P < 0.05$ (spaces around operator)

s (sedimentation coefficient)

SEM = standard error of the mean

SD = standard deviation

n and N (number; rom)

t-test

r (coefficient of correlation)

R (coefficient of multiple correlation)

NS = not significant

chi^2 test

ρ (rho) for density