

ABBREVIATIONS USED IN THIS JOURNAL

The following list provides a useful guide to the preferred abbreviations of the more frequently used units and words other than units. Note that full points are omitted wherever possible, but always retained where confusion may otherwise be caused. Also note that, generally speaking, the plural is the same as the singular, i.e. "s" is not added.

Ad libitum	ad lib.	Feet, foot	ft	Millisecond	ms
Alternating current	a.c.	Freezing point	f.p.	Milliosmolar	mOsM
Ampere	A			Minute(s)	min
Analysis of variance	ANOVA	Gas chromatography-mass spectrometry	GC-MS	Molar concentration	M
Ångström	Å	Gas-liquid chromatography	GLC	Molecular weight	MW
Ante meridian	a.m.	Gauss	G	Nanometer	nm
Atmosphere	atm	Gram	g	Nanomole	nmol
Atomic weight	at.wt.	Gram-molecule	mol	Normal concentration	N
Base pair	bp	Gray (equivalent to 100 rads)	g	Nuclear magnetic resonance	NMR
Becquerel	Bq		Gy	Number	No.
Boiling point	b.p.			Ohm	Ω
Calorie	cal			Optical density	O.D.
Centimeter	cm	Hertz	Hz	Outside diameter	o.d.
Central nervous system	CNS	High performance (pressure) liquid chromatography	HPLC	Parts per million	ppm
Circa	ca.	Hour(s)	h	Per os (oral)	p.o.
Colony-forming unit	cfu	Inch	in.	Picomole	pmol
Concentration that causes 50% inhibition	IC ₅₀	Infrared	i.r.	Polyacrylamide gel electrophoresis	PAGE
Concentration that is 50% effective	EC ₅₀	Internal diameter	i.d.	Post-meridian	p.m.
Correlation coefficient	r	International unit	IU	Probability	P
Coulomb	C	International unit of absorbed dose of ionizing radiation	rad	Proton magnetic resonance	PMR
Counts per minute	cpm	Intramuscular	i.m.	Radian	rad
Counts per second	cps	Intraperitoneal	i.p.	Relative molecular mass (relative mobility)	M _r
Cubic centimeter	cm ³	Intravenous	i.v.	Revolutions per minute	rpm
Cubic inch	in ³			Root mean square	r.m.s.
Cubic meter	m ³				
Curie	Ci				
Dalton	Da	Joule	J		
Degrees					
Celsius	°C	Kilobase	kb	Second(s)	s
Centigrade	°C	Kilocalorie	kcal	Sedimentation coefficient (specific)	S _{20,w}
Fahrenheit	°F	Kilocycles per second	kHz	Siever	Sv
Kelvin	K	Kilodalton	kDa	Species	sp
Degree (temperature difference)	deg.	Kilogram	kg	Specific activity	sp. act.
Degrees of freedom	df	Kilometer	km	Specific gravity	sp. g.
Direct current	d.c.	Kilovolt	kV	Specific volume	sp. vol.
Disintegrations per minute	dpm	Kilowatt	kW	Square foot	ft ²
Disintegrations per second	dps	Liter	l	Square inch	in ²
Dose that causes 50% inhibition	ID ₅₀	Logarithm	log	Square meter	m ²
Dose that causes 50% lethality	LD ₅₀	Logarithm (natural)	ln	Standard deviation	S.D.
Dose that is 50% effective	ED ₅₀	Magnetomotive force	m.m.f.	Standard error of the mean	S.E.M.
Electrocardiogram	ECG	Maximum velocity	V _{max}	Standard temperature and pressure	S.T.P.
Electroencephalogram	EEG	Megalectron volts	MeV	Subcutaneous	s.c.
Electromagnetic unit	e.m.u.	Megahertz	MHz	Thin-layer chromatography	TLC
Electromotive force	e.m.f.	Melting point	m.p.		
Electron paramagnetic resonance	EPR	Meter	m		
Electron spin resonance	ESR	Michaelis constant	K _m		
Electron volt	eV	Microgram	μg		
Electrostatic unit	e.s.u.	Microliter	μl	Ultraviolet	UV
Enzyme-linked immunosorbent assay	ELISA	Micrometer ("micron")	μm	Units	U
Experiment	Expt.	Micromolar	μM		
Extinction coefficient (specific)	E _{∞,θ}	Micromole	μmol	Versus	vs
		Millicurie	mCi	Volt	V
		Milliequivalent	mEq	Volume	vol.
		Milligram	mg	Volume by volume	v/v
		Milliliter	ml		
		Millimeter	mm	Watt	W
		Millimolar	mM	Weight	wt
Fast atom bombardment	FAB	Millimole	mmol	Weight by volume	w/v

Prefixes to the Names of Units

Multiplier	Prefix	Symbol	Multiplier	Prefix	Symbol
10^{-1}	deci	d	10	deca	da
10^{-2}	centi	c	10^2	hecto	h
10^{-3}	milli	m	10^3	kilo	k
10^{-6}	micro	μ	10^6	mega	M
10^{-9}	nano	n	10^9	giga	G
10^{-12}	pico	p	10^{12}	tera	T
10^{-15}	femto	f	10^{15}	peta	P
10^{-18}	atto	a	10^{18}	exa	E

Listed below are internationally accepted biochemical abbreviations and their definitions, as well as abbreviations and definitions for other biochemicals that are used frequently. These abbreviations do not need to be defined.

BSA	bovine serum albumin
CoA	coenzyme A
DMSO	dimethyl sulfoxide
DNA	deoxyribonucleic acid
EDTA	ethylenediaminetetraacetic acid
EGTA	ethylene glycol-bis(β-aminoethyl ether)-N,N,N',N'-tetraacetic acid
FAD	flavin adenine dinucleotide
GSH	reduced glutathione
GSSG	oxidized glutathione
HEPES	N-2-hydroxyethylpiperazine-N'-2-ethanesulfonic acid
NAD	nicotinamide adenine dinucleotide
NADH	reduced nicotinamide adenine dinucleotide
NADP	nicotinamide adenine dinucleotide phosphate
NADPH	reduced nicotinamide adenine dinucleotide phosphate
PBS	phosphate-buffered saline
RNA	ribonucleic acid
SDS	sodium dodecyl sulfate
Tris	2-amino-2-hydroxymethylpropane-1,3-diol

Accepted abbreviations may be used for 5'-ribonucleotides (GMP, ADP, UTP, etc.) and 5'-deoxyribonucleotides (dAMP, dCDP, dTTP, etc.).