

List of abbreviations

The abbreviations listed here are used without definition in articles published in the *Iranian Biomedical Journal*. The form may be used for both singular and plural.

::	novel junction (fusion or insertion)	HEPES	<i>N</i> -2-hydroxyethylpiperazine- <i>N'</i> -2-ethanesulfonic acid	PBMC	peripheral blood mononuclear cell
A	absorbance, adenosine, ampere	HIV	human immunodeficiency virus	PBS	phosphate-buffered saline
aa	amino acid	HLA	human histocompatibility leukocyte antigens	PCR	polymerase chain reaction
Ab	antibody	HPLC	high performance liquid chromatography	PE	phycoerythrin
Ag	antigen	HPRT	hypoxanthine-guanine phosphoribosyl transferase	PEG	polyethylene glycol
AIDS	acquired immune deficiency syndrome	HSV	herpes simplex virus	pfu	plaque-forming unit
A-MuLV	Abelson murine leukemia virus	HTLV	human T lymphocyte virus	PHA	phytohemagglutinin
AMV	avian myeloblastosis virus	i.d.	intradermal	P _i	inorganic phosphate
APC	antigen-presenting cell	i.m.	intramuscular	PMA	phorbol myristate acetate
ATP	adenosine triphosphate (also ADP, AMP)	i.p.	intraperitoneal	PMN	polymorphonuclear leukocytes
BCG	Bacillus Calmette Gue'rin	i.v.	intravenous	PMSF	phenylmethylsulfony fluoride
bp	base pair	ID ₅₀	50% infective dose or 50% inhibiting dose	ppm	points per million
BSA	bovine serum albumin	IEF	isoelectric focusing	PWM	pokeweed mitogen
C	region, constant region of Ig, complement, cytidine	IFA	incomplete Freund's adjuvant	R	receptor (e.g., IL-2R)
°C	degree Celsius	IFN	interferon (e.g., IFN-γ)	r	recombinant (e.g., rIFN-γ)
cal	calorie	Ig	immunoglobulin	RBC	red blood cell
cAMP	cyclic AMP (adenosine 3', 5'-mono-phosphate)	IL	interleukin (e.g., IL-2)	RF	rheumatoid factor
cDNA	complementary DNA	IU	international unit	RIA	radioimmunoassay
CDR	complementarity determining region	J region	joining region of Ig or TCR	RNA	ribonucleic acid
CFA	complete Freund's adjuvant	kb	kilobase (s) or 1000 pb	RNase	ribonuclease
CFU	colony-forming unit	kDa	kilodalton (s)	rpm	revolutions per minute
CHO	Chinese hamster ovary	KLH	keyhole limpet hemocyanin	rRNA	ribosomal RNA
CLL	chronic lymphocytic leukemia	l (L)	liter	s	second (time)
Ci	curie	LAK	lymphokine-activated killer	S	sedimentation constant, Svedberg unit of sedimentation coefficient
CMV	cytomegalovirus	LD ₅₀	50% lethal dose	s.c.	subcutaneous
Con A	concanavalin A	LFA-1	leukocyte function-associated antigen-1	SCID	severe combined immunodeficiency
cpm	counts per minute	LN	lymph node	SD	standard deviation
CSF	colony-stimulating factor	ln	logarithm (base <i>e</i>)	SDS	sodium dodecyl sulfate
CTL	cytotoxic T lymphocyte	log	logarithm (base 10)	SE	standard error
d	day	LPS	lipopolysaccharide	SEM	standard error of the mean
D	region, diversity region of Ig or TCR	m	meter	SLE	systemic lupus erythematosus
DEAE	diethylaminoethyl	M	molar	sp.	species (singular)
DMEM	Dulbecco's modified Eagle's medium	mAb	monoclonal antibody	sp act	specific activity
DMSO	dimethyl sulfoxide	2-ME	2-mercaptoethanol	spp.	species (plural)
DNA	deoxyribonucleic acid	MEM	minimum essential medium	SRBC	sheep red blood cells
DNase	deoxyribonuclease	MHC	major histocompatibility complex	ss	single-strand (ed) (e.g., ssDNA)
DNP	dinitrophenyl	min	minute	SSC	standard saline citrate
dNTP	deoxyribonucleosid triphosphate	ml	milliliter	SV40	simian virus 40
dpm	disintegrations per minute	MLC	mixed lymphocyte culture	T	thymidine
ds	double-strand (ed) (as dsDNA)	MLR	mixed leukocyte reaction	<i>t</i> _{1/2}	half-life, half-time
DTT	dithiothreitol	Mls	minor lymphocyte stimulating	<i>t</i> ₁ / <i>T</i>	terminator of transcription
E:T ratio	effector to target ratio	mo	month	TCA	trichloroacetic acid
EBV	Epstein-Barr virus	mol	mole	TCR	T cell receptor for antigen
ED ₅₀	50% effective dose	<i>M_r</i>	relative molecular mass (dimensionless)	TdR	thymidine deoxyribose (also UdR, AdR)
EDTA	ethylenediaminetetraacetic acid	mRNA	messenger RNA	TFA	trifluoroacetic acid
EGTA	ethyleneglycol-bis(β-aminoethyl ether)- <i>N,N,N',N'</i> , tetraacetic acid	MW	molecular weight	TGF	transforming growth factor
ELISA	enzyme-linked immunosorbent assay	N	any nucleoside	Th cell	T helper cell
EtdBr	ethidium bromide	n	number (sample size)	TK	thymidine kinase
°F	degree Fahrenheit	NAD	nicotinamide-adenine dinucleotide	TLC	thin-layer chromatography
FACS	fluorescence-activated cell sorter	ND	not determined	TMV	tobacco mosaic virus
FCS	fetal calf serum	NK cell	natural killer cell	TNF	tumor necrosis factor
FITC	fluorescein isothiocyanate	No.	number	TNP	trinitrophenyl
g	gram	NP-40	Nonidet P-40	Tris	tris (hydroxymethyl)aminomethane
G	guanosine	NS	not (statistically) significant	Ts cell	T suppressor cell
<i>g</i>	unit of gravity	OD	optical density	U	unit, uridine
Gal	-galactosidase GDP, GMP, GTP, CTP, and UDP)	oligo	oligodeoxyribonucleotide	URF	unidentified open reading frame
GM-CSF	granulocyte/macrophage colony-stimulating factor	ORF	open reading frame	UV	ultraviolet
GVHD	graft-vs-host disease	<i>ori</i>	origin(s) of DNA replication	V	variable region of Ig, volt
H	chain, heavy chain of Ig	osM	osmolar	vol	volume
h	hour	osmol	osmole	W	watt
HAT	hypoxanthine, aminopterin, thymidine	OVA	ovalbumin	wk	week
HBSS	Hanks' balanced salt solution	<i>P</i>	probability	wt	weight
		PAGE	polyacrylamide gel electrophoresis	\bar{x}	mean (sample)
		PBL	peripheral blood lymphocyte	Y	pyrimidine
				yr	year