

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