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CHEMICALS, DRUGS, AND BIOLOGICALS

TWELFTH EDITION

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Abbreviations and Selected Definitions

Please consult the Glossary (Misc. Tables Section) for additional definitions.

A	adenine; adenosine; absorbance (extinction)	A.S.T.M.	American Society for Testing Materials
Å	Angstrom units	<i>as-</i> , <i>asym-</i>	asymmetrical, unsymmetrical
AAT	α_1 -antitrypsin	at.	atomic
Ab	antibody	ATCC	American Type Culture Collection
abs	absolute; absorption	atm, atmos	atmosphere(s), atmospheric
abs config	absolute configuration	at. no.	atomic number
abstr	abstract	ATP	adenosine triphosphate
Abu	α -aminobutyric acid	ATPase	adenosine triphosphatase
Ac	acetyl CH_3CO —	at. wt.	atomic weight
acc	according	BAN	British Approved Name
ACE	angiotensin converting enzyme	B cell	bone marrow or bursa of Fabricius derived cell
Acetyl CoA	acetyl coenzyme A	BCG	Bacillus Calmette-Guerin
Ac ₂ O	acetic anhydride	Bé	Baumé (a specific gravity scale)
AcOEt	ethyl acetate	Beilstein	Beilstein's <i>Handbuch der Organischen Chemie</i>
AcOH	acetic acid	Belg. pat.	Belgian patent
ACP	acyl carrier protein	Ber.	<i>Chemische Berichte</i> (Berichte der Deutschen Chemischen Gesellschaft)
A.C.S.	American Chemical Society	BGG	bovine gamma globulin
ACTH	adrenocorticotrophic hormone	biol	biological
AcylSCoA	acyl coenzyme A	B.I.O.S.	British Intelligence Objectives Subcommittee
ADCC	antibody-dependent cellular cytotoxicity	BOC	<i>tert</i> -butoxycarbonyl
add(n)	adding, addition	B.O.D.	biochemical oxygen demand
Ade	adenine	boil.	boiling
ADH	alcohol dehydrogenase	bp	basepair; boiling point; boils at; boiling at Example: bp ₇₀ 48° means boils at 48°C if the pressure is 70 mm Hg
ADP	adenosine diphosphate	B.P.	British Pharmacopeia
AEC	(United States) Atomic Energy Commission	B.P.C.	British Pharmaceutical Codex
Ag	antigen, silver	Brit. pat.	British patent
AI	anaphylotoxin inhibitor	BRM	biological response modifier
AIDS	acquired immunodeficiency syndrome	BSA	bovine serum albumin
Ala	alanine	Btu	British thermal units
alc, alcohol	alcohol(ic); ethanol; ethyl alcohol	Bu	butyl
ALG	anti-lymphocyte globulin	Bz	benzoyl $\text{C}_6\text{H}_5\text{CO}$ —
alk	alkali(ne)	BzH	benzaldehyde
$[\alpha]_D^{25}$	specific optical rotation at 25° C for D (sodium) line; absence of brackets indicates optical rotation of a liquid in a 1 decimeter cell, neat	BzOH	benzoic acid
ALS	anti-lymphocyte serum, amyotrophic lateral sclerosis	c	concentration by volume (g/100ml) after optical rotations only
a_M	molar absorptivity (concn in g-moles/l)	C	cytosine; cytidine; complement
amorph	amorphous	°C	Centigrade degrees; Celsius degrees
AMP	adenosine 5'-monophosphate (adenylic acid)	C _p	heat capacity (constant pressure) (<i>circa</i>) about
cAMP	cyclic AMP	ca.	<i>Chemical Abstracts</i>
amps	ampules	C.A.	calorie(s)
amt(s)	amount(s)	cal	calculate, calculated
ANF	anti-nuclear factor; atrial natriuretic factor	calc(d)	Canadian patent
anhydr	anhydrous	Can. pat	carbobenzoxy
anti	stereodescriptor, <i>see Glossary</i>	Cbz	complete blood count
Ann.	<i>Justus Liebig's Annalen der Chemie</i>	cbc	cubic centimeter(s) (milliliter)
APhA	American Pharmaceutical Association	CCK	cholecystokinin
approx	approximate(ly)	CD	circular dichroism
APT	alum precipitated toxoid	CDP	cytidine diphosphate
aq	aqueous	CEA	carcinoembryonic antigen
Ar	aryl	cf.	(<i>confer</i>) compare
A.R.	analytical reagent	CFA	complete Freund's adjuvant (same as FCA)
ARC	AIDS related complex	CFT	complement fixation test
Archiv Exp. Pathol. Pharmakol.	<i>Naunyn Schmiedebergs Archiv für Experimentelle Pathologie und Pharmakologie</i>	CHD	coronary heart disease
ArCO-	aromatic acyl radical	CHF	congestive heart failure
Arg	arginine	chem	chemical
Asa	β -carboxyaspartic acid	Chem. Commun.	<i>Journal of the Chemical Society, Chemical Communications.</i>
Asn	asparagine	Ci	curie
Asp	aspartic acid	C.I.	Colour Index (British)
assoc(d)	association; associated	cis-	stereodescriptor, <i>see Glossary</i>
		cm	

CM-cellulose	<i>O</i> -(carboxymethyl) cellulose	D.R.P.	(<i>Deutsches Reichs-Patent</i>)—German patent
CMI	cell-mediated immunity	ds	double stranded
CML	cell-mediated lymphocytotoxicity	DTT	dithiothreitol
CMP	cytidine 5'-monophosphate (cytidylic acid)	dyn	dynes
CNS	central nervous system	(<i>E</i> -)	<i>entgegen</i> , stereodescriptor, <i>see Glossary</i>
CoA or CoASH	coenzyme A	$E_{1\text{cm}}^{1\%}$	the absorbance of a solution containing one gram per 100 ml contained in a cell having an absorption path of one cm
coll. vol.	collective volume	E_M	molar extinction coefficient (concn in g-moles/l)
compd	compound	EAA	excitatory amino acid
compn	composition	EAC	erythrocyte coated by antibody and complement
Con A	concanavalin A	EAE	experimental allergic encephalomyelitis
conc(d)	concentrated	EC	electron capture
concn	concentration	ECF-A	eosinophil chemotactic factor of anaphylaxis
config	configuration	ECG	electrocardiogram
constit	constituent	E.C. No.	Enzyme Commission Number
contd	continued	ed.	edition
contg	containing	ED	effective dose
CoQ	coenzyme Q (ubiquinone)	Ed(s).	editor(s)
cor(r)	corrected	EDTA	ethylenediaminetetraacetic acid
corresp	corresponding, corresponds	EEG	electroencephalogram
cp	centipoise	e.g.	(<i>exempli gratia</i>) for example
C.P.	chemically pure	EGF	epidermal growth factor
cpd	compound	<i>eidem</i>	the same (authors), plural of <i>idem</i>
crit press	critical pressure	EINECS	European Inventory of Existing Chemical Substances
crit temp	critical temperature	EKG	electrocardiogram
cryst	crystalline, crystals	ELISA	enzyme-linked immunosorbent assay
crystn	crystallization	emf	electromotive force
CSF	colony stimulating factor; cerebral spinal fluid	en	ethylenediamine (in formulas)
CTFA	Cosmetic, Toiletory and Fragrance Assoc.	<i>endo-</i>	stereochemical descriptor, <i>see Glossary</i>
CTP	cytidine triphosphate	EPA	Environmental Protection Agency
Cys	cysteine	EPO	erythropoietin; European Patent Office
Cyt	cytosine	ϵ (epsilon)	molar extinction coefficient (concn in g-moles/l); dielectric constant
d	density; specific gravity (d_4^{19} specific gravity at 19° referred to water at 4°)	eq	equation
<i>d-</i>	<i>dextro</i> (rotatory), the opposite of <i>l</i>	equilib	equilibrium
D-	<i>dextro</i> (in configurational sense only), the opposite of L	equiv	equivalent
Da	daltons	esp	especially
DEAE cellulose	<i>O</i> -(diethylaminoethyl)cellulose	esu	electrostatic units of electrical charge
dec, decomp	decompose(s), decomposition	Et	ethyl C ₂ H ₅ —
decompn	decomposition	η (eta)	viscosity
deg	degree	<i>et al.</i>	(<i>et alii</i>) and others
deliquesc	deliquescent	etc.	<i>et cetera</i>
Δ (delta)	indicates the locant of the double bond	Et ₂ O	ether
deriv	derivative	EtOH	ethyl alcohol
determn	determination	Eur. pat. Appl.	European patent application
DFP, DIFP, DIPP	diisopropyl fluorophosphate or diisopropyl phosphofluoridate	ev	electron volt
Dha	dihydroalanine	evac	evacuated
Dhb	dehydrobutyrine, β -methyldehydroalanine	evapn	evaporation
diff	difference	<i>exo-</i>	stereochemical descriptor, <i>see Glossary</i>
dil(d), (n)	dilute, diluted, dilution	expt(ly)	experimental(ly)
distln	distillation	ext(d)	extract, extracted
<i>dl-</i>	racemic	extern	externally
DL-	optically inactive by external compensation as contrasted with <i>meso-</i>	$^{\circ}\text{F}$	Fahrenheit degrees; also Fourneau
dm	decimeter(s)	F-1-P	fructose 1-phosphate
DMA	dimethylacetamide	F-6-P	fructose 6-phosphate
DMARD	disease modifying antirheumatic drug	FA	fatty acid
DMF	dimethylformamide	FAB	fast atom bombardment
DMSO	dimethylsulfoxide	FAD (FADH ₂)	flavin adenine dinucleotide (reduced form)
DNA	deoxyribonucleic acid	FCA	Freund's complete adjuvant (same as CFA)
cDNA	complementary DNA	Fd	ferredoxin
mtDNA	mitochondrial DNA	F.D.A.	Food and Drug Administration
DNAase	deoxyribonuclease		
DNFB	2,4-dinitro-1-fluorobenzene		
DNP	2,4-dinitrophenyl or 2,4-dinitrophenol		
Dopa	dihydroxyphenylalanine		

FDNB	1-fluoro-2,4-dinitrobenzene	GVH	graft-versus-host
FDP	fructose 1,6-diphosphate	habit.	habitat
ff	following	Har	homoarginine
FFA	free fatty acid	Hb	hemoglobin
FFC	free from chlorine	HbCO	carbon monoxide hemoglobin; carboxyhemoglobin
FIA	Freund's incomplete adjuvant (same as ICFA)	HbO ₂	oxyhemoglobin
FIAT	Field Information Agency, Technical (U.S. reports)	HCG	human chorionic gonadotropin
FMN (FMNH ₂)	flavin mononucleotide (reduced form); same as riboflavin phosphate	Hcy	homocysteine
Fmoc	9-fluorenylmethoxycarbonyl	HDL	high density lipoproteins
<i>Fortschr. Chem.</i>	<i>Fortschritte der Chemie Organischer</i>	HeLa	cells of the first continuously cultured (human cervical) carcinoma strain
<i>Org. Naturst.</i>	<i>Naturstoffe</i> (Progress in the Chemistry of Organic Natural Products)	HGG	human gamma globulin
fp	freezing point	HGH	human growth hormone
FP	flavoprotein	His	histidine
FPLC	fast protein liquid chromatography	HIV	human immunodeficiency virus
Fr. pat.	French patent	Hiv	α-hydroxyisovaline
<i>Frdl.</i>	<i>P. Friedlander Fortschritte der Teer- farbenfabrikation</i> , a collection of patents	HLA	human leukocyte antigen
Fru	fructose	HMG-CoA	3-hydroxy-3-methylglutaryl coenzyme A
FSH	follicle-stimulating hormone	<i>Houben</i>	a German collection of medicinal patents
FT	Fourier transform	<i>Houben Weyl</i>	<i>Houben-Weyl Methoden der Organischen Chemie</i> , a German collection of preparative methods in organic chemistry
g	gram(s)	HPLC	high performance (pressure, power) liquid chromatography
G	guanine; guanosine	hr	hour
G-1-P	glucose 1-phosphate	HSA	human serum albumin
G-3-P	glyceraldehyde 3-phosphate	Hse	homoserine
G-6-P	glucose 6-phosphate	HSV	herpes simplex virus
GABA	γ-aminobutyric acid	HT	hydroxytryptamine (serotonin)
gal	gallon(s)	HTLV	human T lymphotropic virus <i>see also</i> HIV
Gal	galactose	Hyl	hydroxylysine
GalNAc	N-acetyl-D-galactosamine	Hyp	hydroxyproline
γ (gamma)	microgram(s)	<i>i-</i>	optically inactive by internal compensation as <i>i</i> -inositol; archaic for <i>meso</i> -
GC	gas chromatography	I	inosine
GDH	glutamate dehydrogenase	Ia	I-region antigen
GDP	guanosine diphosphate	IACR	International Association of Cancer Registries
<i>gem-</i>	geminal, stereodescriptor <i>see</i> <i>Glossary</i>	IARC	International Agency for Research on Cancer
geol	geological	<i>IARC Monographs</i>	<i>IARC Monographs on the Evaluation of Carcinogenic Risk of Chemicals to Man</i>
Ger. pat.	German patent	<i>ibid.</i>	(<i>ibidem</i>) at the same place
GH	growth hormone	I.C.C.	Interstate Commerce Commission
GI	gastrointestinal	ICFA	incomplete Freund's adjuvant (same as FIA)
g/l	grams per liter	ICSH	interstitial cell-stimulating hormone (same as LH)
Gla	γ-carboxyglutamic acid	IDDM	insulin dependent diabetes mellitus the same (author); plural: <i>idem</i> , the same (authors)
Glc	glucose	<i>idem</i>	
GLC	gas-liquid chromatography	IDP	inosine diphosphate (<i>id est</i>) that is
GlcA	gluconic acid	i.e.	
GlcN	glucosamine	IEF	Isoelectric focusing
GlcNAc	N-acetyl-D-glucosamine	IF, IFN	interferon
GlcUA	glucuronic acid	i.g.	intra-gastric
Gln	glutamine	Ig	immunoglobulin
Glu	glutamic acid	I.G. Farben	<i>Interessengemeinschaft der Farbenindustrie, Aktiengesellschaft-</i> the German dye trust
GluA	glucuronic acid	IGF-1	insulin-like growth factor 1
Gly	glycine	IL	interleukin
Glycerol-3-P	glycerol 3-phosphate	Ile	isoleucine
<i>Gmelin's</i>	<i>Gmelin's Handbuch der Anorganischen Chemie</i> , a comprehensive German encyclopedia of inorganic chemistry	i.m.	intramuscular
GMP	guanosine 5'-monophosphate (guanylic acid)	IMP	inosine 5'-monophosphate (inosinic acid)
cGMP	cyclic GMP	incl	including
GM-CSF	granulocyte macrophage colony stimulating factor	incompat	incompatibility
gov't	government	INN	International Nonproprietary Name
GP	glycoprotein		
GRF, GHRF	growth hormone releasing factor		
GSH	glutathione (reduced)		
GSSG	glutathione (oxidized)		
GTP	guanosine triphosphate		
GU	genitourinary		
Gua	guanine		

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