Appendix B - Lists and directories

List of abbreviations

AEC	anion exchange chromatography
APBS	adaptive Poisson-Boltzmann solver
Bc-Csp	*Bacillus caldolyticus* Csp
Bs-CspB	*Bacillus subtilis* Csp
calc.	calculated
CD	circular dichroism
Csp / CSP	a specific cold shock protein / cold shock protein(s) (in general)
CSD	cold shock domain(s)
DEAE sepharose	diethyl-amino-ethyl sepharose (a column material for anion exchange chromatography)
diglycerides	diacylphosphatidylglycerides
dT_6, dC_6	deoxyribo hexathymidine, deoxyribo hexacytidine
dT_7, dC_7	deoxyribo heptathymidine, deoxyribo heptacytidine
DNA	deoxyribonucleic acid
dNTP	deoxyribonucleoside triphosphate
Ec-CspA	*Escherichia coli* CspA
EDTA	ethylene-diamine-tetraacetate
FPLC	fast phase liquid chromatography
GFC	gel filtration chromatography
HCOH	formaldehyde
HIC	hydrophobic interaction chromatography
IPTG	isopropyl thiogalactoside
K_A, K_D	equilibrium association and dissociation constants (see Equation 2.6 & Equation 2.7)
k_{on}, k_{off},	association and dissociation rate constants
k_{obs}	observed quasi first-order rate constant in stopped-flow analyses (see Equation 2.10)
LB	Luria-Bertani medium for bacterial cell culture
mRNA	messenger RNA
mol.	molecular
MPD	2-methyl-2,4-pentanediol
MR	molecular replacement
OB-fold	oligonucleotide / oligosaccharide binding fold
PCR	polymerase chain reaction
pH	*potentia hydrogenii* ($\log c_{H_3O^+}$), measure for acidity in aqueous solutions
pI	isolelectric point (pH at which a molecule has a net charge of 0)
PDB	Protein Data Bank, see [111]

RMSD	root mean square deviation
RNA	ribonucleic acid
RNP	ribonucleoprotein
rpm	rotations per minute
rxn.	reaction
PAGE	poly-acrylamide gel electrophoresis
PEG	polyethylene glycol
SDS	sodium dodecyl sulfate
ssDNA	single-stranded DNA
ssRNA	single-stranded RNA
TBE	TRIS-borate-EDTA buffer
TCA	tri chlorine acetate
TEMED	N,N,N',N'-tetramethylethylenediamine
TLS	translational, librational, & screw [parameters]
T_M	melting temperature
Tm-Csp	*Thermotoga maritima* Csp
TRIS	tris(hydroxymethyl)-aminomethan
UV / vis	ultraviolet / visible (light)
vs.	*versus* (= in comparison to)

physical units

°C	temperature unit, degrees Celsius
Å	distance unit, Ångstroem (10^{-10} m)
A	electrical currency unit, Ampère
Da	molecular weight unit , Dalton, ~ g / mol
g	mass unit, gram
h	time unit, equal 60 minutes
l	volume unit, liter
m	distance unit, meter
mol	molecular unit, mole, equals 6.023 10^{23} particles of a substance
M	concentration unit, molar, moles per liter
min	time unit, minute, equals 60 seconds
psi	pressure unit, 1 psi = 6894.8 Pa
Pa	pressure unit, Pascal (pressure unit)
s	time unit, second
u	(biological) activity unit, describes the activity of an enzyme
V	electrical voltage unit, Volt

prefixes defining orders of magnitude

p	pico, 10^{-12}	k	kilo, 10^{3}
n	nano, 10^{-9}	M	mega, 10^{6}
µ	micro, 10^{-6}	G	giga, 10^{9}
m	milli, 10^{-3}		

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