Abbreviations, Symbols and Units

Abbreviations

2D, 3D two-, three-dimensional APS ammonium persulfate ATP adenosine triphosphate

BBP branch-point binding protein

BSA bovine serum albumine
Clf1 crooked neck-like factor 1
COSY correlated spectroscopy
CSA chemical shift anisotropy

CTD carboxy-terminal domain of RNA polymerase II

DHPC dihexanoylphosphatidylcholine DMPC dimyristoylphosphatidylcholine

DMSO dimethyl sulfoxide

DNA deoxyribonucleic acid

E. coli Escherichia coli

EDTA ethylene diamine tetra acetic acid

EGF epidermal growth factor
FBP formin binding protein
FID free induction decay

GST glutathione-S-transferase
GTP guanosine triphosphate

HMQC heteronuclear multiple quantum coherence HSQC heteronuclear single quantum coherence

Ig immunoglobin

IPAP in-phase anti-phase

IPTG isopropyl- β -D-1-thiogalactopyranoside

LB Luria-Bertani

mRNA messenger ribonucleic acid

NMR nuclear magnetic resonance

NOE nuclear Overhauser effect

PAGE polyacrylamide gel electrophoresis

PAS principle axis system

PCR polymerase chain reaction

PMSF phenylmethanesulfonyl-fluoride

ppm parts per million

Prp pre-mRNA processing protein RDCs residual dipolar couplings

RF radio-frequency

Sc. Saccharomyces cerevisiae
SDS sodium dodecyl sulfate

SF1 splicing factor 1 snRNA small nuclear RNA

snRNP small nuclear ribonucleo protein

TEMED N,N,N',N'-tetramethyl ethylene diamine

TEV tobacco etch virus

TOCSY total correlation spectroscopy

TPPI time proportional phase incrementation

TPR tetratrico peptide repeat

YAP Yes-kinase associated protein

Symbols

 γ gyromagnetic ratio of a nucleus

 ΔE energy level difference extinction coefficient magnetic moment u transition frequency

 ν_0 Larmor frequency in Hz

 $\hat{\sigma}$ density matrix σ chemical shift au time delay

 au_c rotational correlation time

 ω_0 angular frequency in rad·s⁻¹

 A_{280} absorbance at 280 nm

 A_a, A_r axial, rhombic component of the alignment tensor \tilde{A}

 B_1 magnetic field strength of a radiofrequency pulse

 B_0 static magnetic field

c concentration

D residual dipolar coupling constant

h Planck's constant $(6.626 \cdot 10^{-34} \text{ Js})$

 \hbar h / 2π

 $\hat{\mathcal{H}}$ Hamilton operator

 \hat{I} spin angular momentum operator

I spin quantum number associated with \hat{I}

J scalar coupling constant

 $J(\omega)$ spectral density function at frequency ω

 \vec{M} magnetisation vector

 m_I eigenvlaue of \hat{I}_z

r internuclear distance

 R_1 longitudinal relaxation rate

 R_2 transverse relaxation rate

 ${\cal S}$ order matrix T temperature

t time

Units

metre

0 degree bp base-pair \mathbf{C} Celsius Da Dalton HzHertz K Kelvin 1 litre $\text{mol} \cdot l^{-1}$ Μ

 \mathbf{m}

s second

 $\rm w/v$ weight/volume

Å Ångström (1 Å = 10^{-10} m)

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