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3. Abbreviations

A Adenine

APS Ammonium persulfate

bp base pair C Cytosine

CD Circular dichroism
cpm counts per minute
dA Desoxyadenosine
dC Desoxycytosine
DEBC Diothylpyrocarbonate

DEPC Diethylpyrocarbonate
dG Desoxyguanosine
DNA Desoxyribonucleic acid

dsRNA double stranded ribonucleic acid

dT Desoxythymidine

G Guanosine kD kilodalton

NMR Nuclear Magnetic Resonance mRNA Messenger ribonucleid acid

OD Optical density

PAGE Polyacrylamide gel electrophoresis

PCR Polymerase chain reaction

PEG Polyethylenglycol

PMSF Phenylmethylsulfonylfluoride

R Purine

RNA Ribonucleic acid rpm rounds per minute SDS Sodiumdodecylsulfate

T Thymidine

TEMED N,N,N',N'-Tetramethylethylenediamine Tris Tris-(hydroxymethyl-)aminomethane

Y Pyrimidine

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Conventions for writing nucleic acid sequences

Different systems of notations have been used to describe the sequences of nucleic acids. A generally applicable system has been developed (IUPAC-IUB Commission on Biochemical Nomenclature 1970). However, in this work the differing notation used by Sinden has been adopted with minor changes (Sinden 1994).

DNA or RNA

Unless specified by a preceding r, all sequences are assumed to be DNA sequences; thus A denotes deoxyadenosine, whereas rA denotes adenosine.

Sequence polarity

The sequence is written from left to right in the 5' to 3' direction; thus the sequence GGAATTCC refers to 5' GGAATTCC 3'. In double stranded DNA a single sequence motif often represents two sequence words, since the sequence of the complementary strand will not be identical. In cases were this distinction is of importance both sequence words have been indicated using a slash between both sequence words (i.e. CGCGC / GCGCG)

Base pairs

Base pairs are designated by a dot: A·T or G·C.

Polynucleotides of defined length composed of a simple repeating sequence unit

Oligonucleotides are written as successive letters (see above). Repeating units within oligonucleotides are often enclosed in brackets and the number of repeats given as a subscript; thus (CG)₃ refers to CGCGCG.

Polynucleotides of undefined length

Repeating units within the sequence are designated by poly(x) where x indicates the repeating unit; i.e. poly(A) or poly(AT).

Double-stranded polynucleotides

Base paired polymers are written with 5' to 3' polarity; i.e. poly(A)-poly(T) or poly(AT)-poly(AT).

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