

TxCETP Course Component: DNA Fingerprinting, "Who Done It?"

This material is based on work supported by the National Science Foundation under Grant No. DUE 9987332.

Appendices

A short list of some additional restriction enzymes and their recognition sequences and cut sites. This is not a complete list of all restriction enzymes now known; and more are being discovered. For the first five enzymes, both strands of the DNA recognition sequence are shown. For the remaining enzymes, only one strand of the recognition sequence is shown. Can you determine which of the enzymes listed below would produce blunt ends, and which would produce sticky ends?

Enzyme	Recognition Sequence	Enzyme	Recognition Sequence
AluI	AG↓CT TC↑GA	PvuII	CAG↓CTG
AosI	TGC↓GCA ACG↑CGT	RsaI	GT↓AC
AsuII	TT↓CG AA AA CG↑TT	SacI	GAGCT↓C
BamHI	G↓GATC C C CTAG↑G	SacII	CCGC↓GG
BclI	T↓GATC A A CTAG↑T	SalI	G↓TCGAC
BglII	A↓GATCT	SmaI	CCC↓GGG
ClaI	AT↓CGAT	SphI	GCATG↓C
FnuDII	CG↓CG	SstI	GAGCT↓C
HhaI	GCG↓C	TaqI	T↓CGA
HindIII	A↓AGCTT	ThaI	CG↓CG
HpaI	GTT↓AAC	XbaI	T↓CTAGA
HpaII	C↓CGG	XhoI	C↓TCGAG
KpnI	GGTAC↓C	XmaI	C↓CCGGG
MboI	↓GATC	XmaIII	C↓GGCCG
MspI	C↓CGG	XorII	CGATC↓G
PstI	CTGCA↓G		