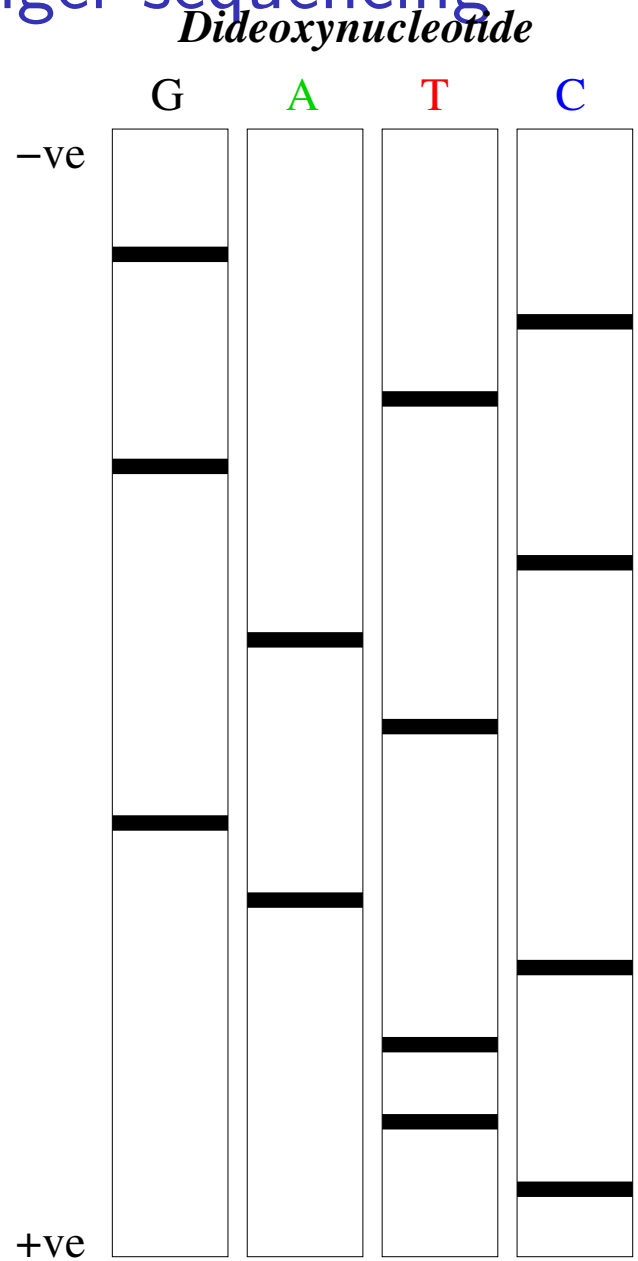
# Sanger sequencing




***Inferred DNA sequence***

$^{P\,32}$C T T C A G T A C G T C G

$^{P\,32}$C T T C A G T A C G T C

$^{P\,32}$C T T C A G T A C G T

$^{P\,32}$C T T C A G T A C G

$^{P\,32}$C T T C A G T A C

$^{P\,32}$C T T C A G T A

$^{P\,32}$C T T C A G T

$^{P\,32}$C T T C A G

$^{P\,32}$C T T C A

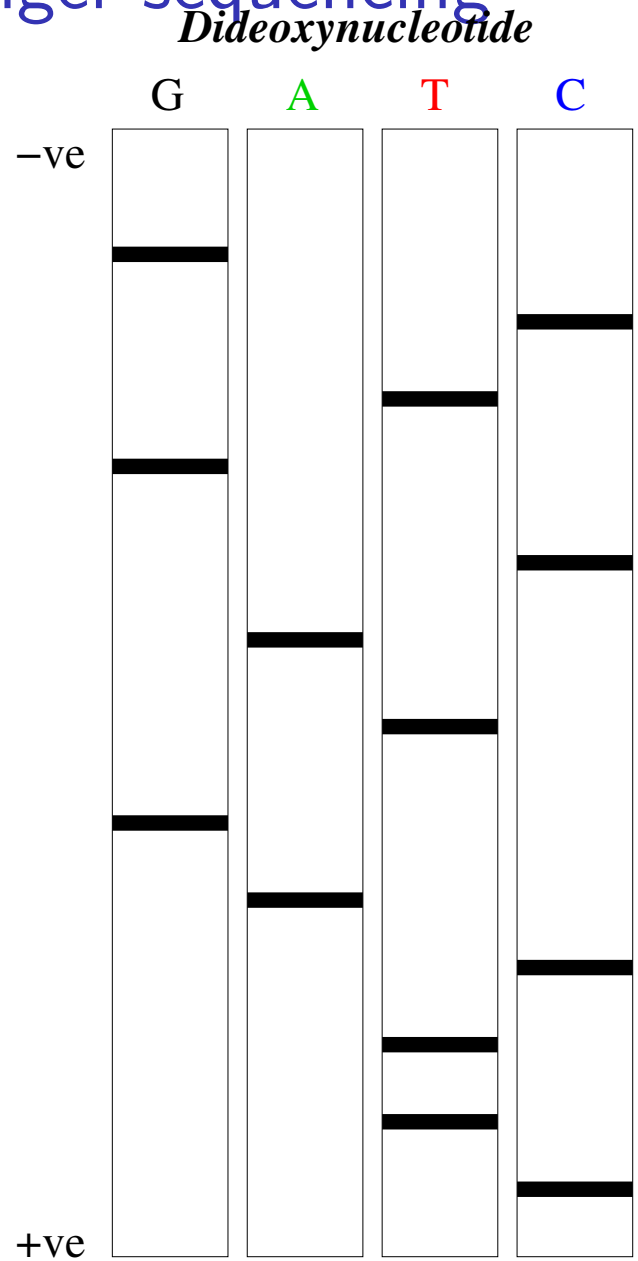
$^{P\,32}$C T T C

$^{P\,32}$C T T

$^{P\,32}$C T

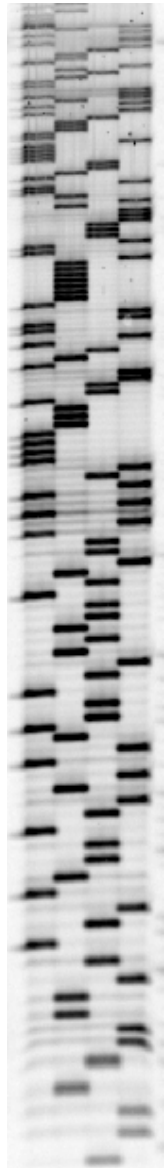
$^{P\,32}$C

# Sanger sequencing




***Inferred DNA sequence***

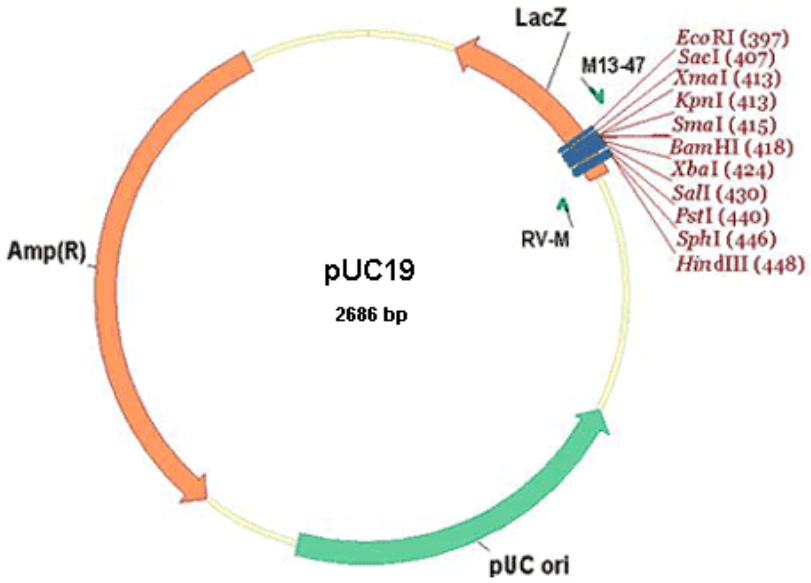
$^{P32}$CTTCAGTACGTCG
$^{P32}$CTTCAGTACGTC
$^{P32}$CTTCAGTACGT
$^{P32}$CTTCAGTACG
$^{P32}$CTTCAGTAC
$^{P32}$CTTCAGTA
$^{P32}$CTTCAGT
$^{P32}$CTTCAG
$^{P32}$CTTCA
$^{P32}$CTTC
$^{P32}$CTT
$^{P32}$CT
$^{P32}$C

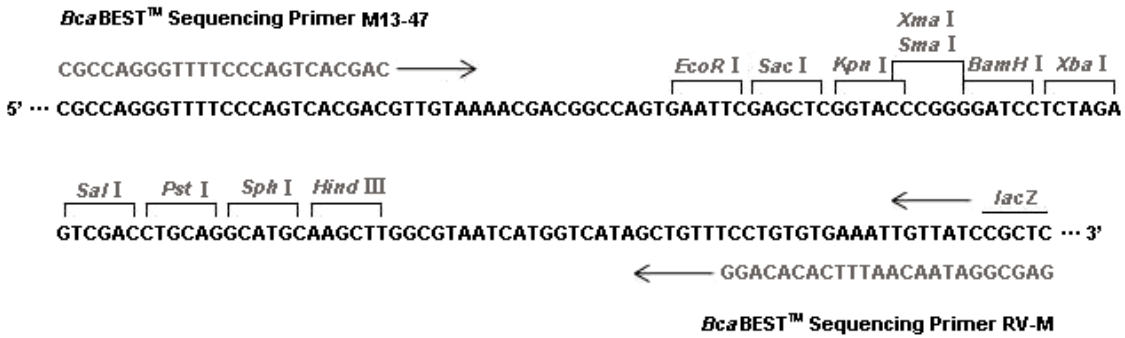


Autoradiogram courtesy of Dr. Rahat Zaheer

video 1 — video 2 — video 3

# A typical sequencing/cloning plasmid




pUC19 is a small, high-copy number *E. coli* plasmid cloning vector, with multiple cloning sites. The molecule is 2686 bp in length. pUC19 encodes the N-terminal fragment of b-galactosidase (lacZa), which allows for blue/white colony screening (i.e., a-complementation), as well as a pUC origin of replication.

The cloned sequence can be amplified by PCR with M13-47 and RV-M primers or sequenced with either primer.