

### Answer to the question #46782, Biology, Molecular Biology

Design PCR primers to amplify Kringles 2-4 of human plasminogen for directional subcloning into PBluescript. Show the exact sequence where the PCR product is directionally ligated (2 restriction enzymes) into the vector ( don't show all the intervening DNA of the PCR product).

#### Answer:

For (EcoRI)

5`-GAATTCtgcgacattcttgagtgt-3`

Rev (BamHI)

5`-GGATTCcaacactcgcttctgttc-3`

Here is sequence of PCR product inserted into the vector. «|» marks place of ligation. Sequence of the vector is shown in blue, of the insert — in black.

-pBluescript--G|GATTCtgcgacattcttgagtgt-----gaacagaagcgagtgtgCCTAG|G-pBluescript-  
-pBluescript--CCTAA|Gacgctgaagaactcaca-----ctgtcttcgctcacaacG|GATCC-pBluescript-