

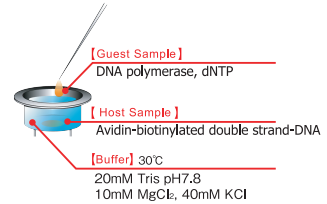
A-06

Chem. Eur. J., 7, 3305-3301 (2001) H.Matsuno
 Experimental Medicine 20, 16, 2384-2385 (2002)
 by H. Matsuno, School of Life Science and Engineering, Tokyo Institute of Technology

Analysis of DNA Elongation Reaction

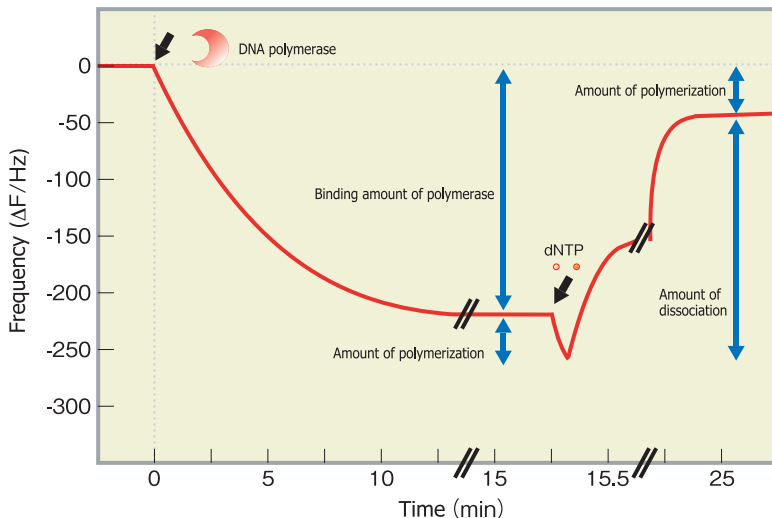
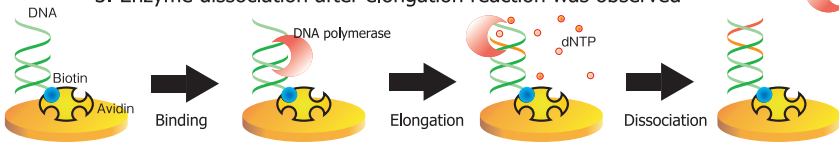
Materials

1. Avidin
2. Biotinylated DNA (double-strand with overhang)
3. E. coli DNA polymerase (klenow fragment)
4. Monomer (dNTP [N=A,G,C,T])



Results

1. Binding between an enzyme per 3 DNA chains was observed
2. Elongation reaction of DNA upon monomer addition was observed
3. Enzyme dissociation after elongation reaction was observed



Application

1. Kinetic analysis of enzyme reaction on DNA
2. Monitoring of glycosylase reactions
3. Monitoring of protease reactions