SinaClon
شرکت سیناکلون BioScience

dNTP Mix (Molecular biology grade)

Concentration: 10mM

Cat. No.: MM2081 (Vol.:100µl)
Cat. No.: MM2082 (Vol.:500 µl)

Store at: -20°C
Shipment: Dry or Wet ice

Description: Ready to use dNTP mixture. In this product concentration of each dNTPs is carefully balanced and formulated for higher and maximal fidelity of DNA synthesis.

Composition: SinaClon dNTP mix is prepared from individual ultrapure nucleotides. 10mM of each ultrapure dATP, dCTP, dGTP, dTTP in one vial and in aqueous solution (pH 7.0-7.5).

Application: For use in PCR, long PCR, RT-PCR, cDNA synthesis, primer extension, DNA sequencing and DNA labeling.

Quality control

Functional assay: SinaClon dNTP miv was tested for cDNA synthesis, amplification of 977 and 788 bp multiplex PCR from human genomic DNA and DNA viruses (with SinaClon Taq DNA polymerase and Pfu polymerase).

Individual Ultrapure Nucleotides

		Molecular weight	
1	dATP	557.2	C10H13N5O12P3Na3
2	dCTP	533.1	C9H13N3O13P3Na3
3	dGTP	573.2	C10H13N5O13P3 Na3
4	dTTP	548.1	C10H14N2O14P3Na3

Basic PCR protocol

The following basic serves as a general guideline and a starting point for any PCR amplification. Optimal reaction conditions (incubation times, temperatures, concentration of Taq DNA polymerase, primer, MgCl2 and template DNA) vary and need to be evaluated by the user. Add the following components to a sterile 0.5ml micro centrifuge tube sitting on ice:

Components	Volume	Final Concentration
10XPCR Buffer (AMS)	10µl	1X
10mM dNTP mix	2µl	0.2mM each
50mM MgCl2	3µl	1.5mM
Primers (10µM each)	5µl	0.5µM each
Template DNA	1µg	-----
Taq DNA polymerase	0.5µl	2.5unit/100µl
Autoclaved distilled water	up to 100µl	-----

PCR may be performed in 25-35 cycles as follows

Denaturation	**93°C**	45 seconds
Annealing	55°C	30 seconds
Extension	72°C	90 seconds

Optimal reaction conditions vary and need to be evaluated by the user.
Mix and centrifuge dNTP before opening.

Unit 9, Rouyesh building, Science and Technology Park, Tarbiat Modares University, Pajouhesh Blvd, Tehran, Iran

+982191082111

hi@sinaclon.com

www.sinaclon.com