

7-deaza-dGTP

CATALOG NUMBER: DG-013-0160, 1 μ mol (10mM x 100 μ l)

Application

G residues can form secondary structures which are not fully denatured during electrophoresis. This can lead to sequence ambiguities. 7-Deaza-G doesn't form these secondary structures, so avoids sequence ambiguities.

Description

7-deaza-2'-deoxyguanosine-5'-triphosphate

7-deaza-dGTP may be effectively incorporated into the DNA by DNA polymerases and/or terminal deoxynucleotidyl transferase. 7-deaza-dG-containing DNA duplexes demonstrate increased stability, 7-deaza-dG-containing DNA penetrates cell membrane more effectively due to the increased lipophilicity.

7-deaza dGTP may be used in sequencing for the resolution of the compressions in G-C-rich regions. Amplification of some DNA regions is often hindered due to the high G-C content. Replacement of dGTP to 7-deaza dGTP in the master mix may solve the problems.

Concentration

1 μ mol (100 μ l of 10 mM solution)

Purity

96-99% (HPLC).

Formula

$C_{11}H_{17}N_4O_{13}P_3$, Molecular Weight (506.2)

