



## Product Insert

### dNTP MIX

Research Use Only

#### Product:

dNTP Mix, ready-to-use. Available in 10mM, 40mM and 100mM concentrations.

#### Catalogue numbers:

Cat Number	Final Conc	Presentation
BIO-39044	10mM	1 x 1ml
BIO-39053	10mM	10 x 1ml
BIO-39043	40mM	1 x 500µl
BIO-39028	100mM	1 x 500µl
BIO-39029	100mM	4 x 500µl

#### Description:

A mix of dATP, dGTP, dCTP, and dTTP, (pH 7.0).

#### Typical Analysis:

Lithium salts, >99% deoxynucleoside triphosphates (HPLC, area %), <1% deoxynucleoside monophosphates and deoxynucleoside diphosphates

#### Purity

Bioline dNTP's are >99% pure by HPLC and are free of DNase, RNase, Protease, phosphatase and nicking activity

#### Application:

For direct use in DNA synthesis in vitro. Add the Master Mix directly into the reaction mixture. We recommend a final concentration of between 1-2mM.

Our dNTP's have been tested rigorously for long-range and RT PCR.

#### Storage and stability:

Bioline dNTPs can be stored for 12 months at -20°C or -70°C, in a constant temperature freezer. Avoid multiple freezing/thawing. For long-term usage, aliquoting is recommended.

#### dNTP Characteristics

Deoxynucleotide	Molecular weight	Molar Extinction(1µmol)
dATP	535.2	15.3 ( $A_{260}$ )
dGTP	533	13.7 ( $A_{252}$ )
dCTP	511.1	9.6 ( $A_{272}$ )
dTTP	505.9	8.4 ( $A_{260}$ )

#### 100mM Mix contains 25 mM of each dNTP

Reaction Volume	Master Mix	No: of Reactions
50µl	0.5µl	1000

#### 40mM Mix contains 10 mM of each dNTP

Reaction Volume	Master Mix	No: of Reactions
50µl	1.25µl	400

#### 10mM Mix contains 2.5 mM of each dNTP

Reaction Volume	Master Mix	No: of Reactions
50µl	5.0µl	200

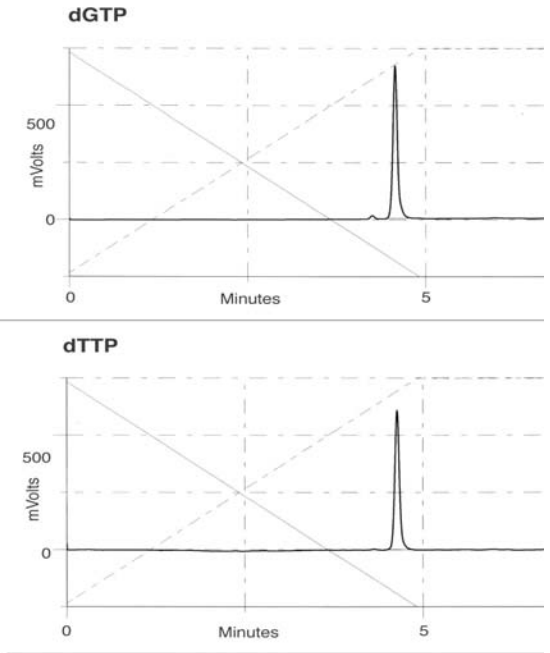
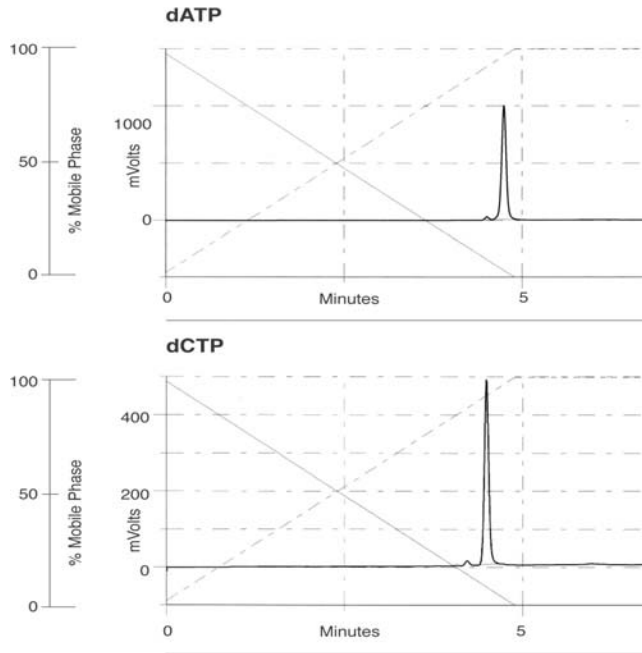
This is a guide only, for long-range applications adjust accordingly.

Note: The PCR process is covered by patents issued and applicable in certain countries.

This product contains a declaration of analysis at the time of manufacture

**See Overleaf for HPLC Analysis**

# HPLC ANALYSIS OF EACH dNTP



— 20mM  $\text{KH}_2\text{PO}_4$ , 2mM TBA Br  
- - - 20mM  $\text{KH}_2\text{PO}_4$ , 2mM TBA Br, Metanol 50%