

# PureStrand<sup>™</sup> 100mM dNTP Set

Catalog No.	Pack Size and Concentration	Components
AZ-1271	4 x 250 μl, 100mM	25 μmol each dATP, dCTP, dGTP and dTTP
AZ-1274	4 x 4 x 250 μl, 100mM	100 µmol each dATP, dCTP, dGTP and dTTP

### **Description**

The PureStrand™ 100mM dNTP Set is comprised of individual ultra-pure 100mM dNTP Solutions of dATP, dCTP, dGTP and dTTP for use in all standard and sensitive PCR applications. Purity of dNTPs is essential for any PCR, Real-Time PCR and cDNA Synthesis application as inhibitors and contaminants can interfere with DNA polymerases and template. PureStrand™ Ultra-Pure dNTPs are purified using exacting processes to eliminate the presence of PCR-specific inhibitors such as tetraphosphates and pyrophosphates. The presence of contaminating impurities can result in a decrease in amplification sensitivity and product yield.

The performance of each lot of PureStrand 100mM dNTP Set is tested in PCR, long PCR and qPCR for sensitivity and reproducibility.

- >99% Triphosphate Purity by HPLC
- Free of contaminating impurities and PCR inhibitors
- DNase, RNase, Nickase and Protease Free
- Shelf-Life of 24 months at −20°C

#### Storage

PureStrand<sup>™</sup> 100mM dNTP Set is shipped on blue ice and should be stored at  $-20^{\circ}$ C upon receipt. Excessive freeze/thawing should be avoided. When stored as specified, PureStrand<sup>™</sup> 100mM dNTP Set is stable for 24 months from date of receipt.

# **Preparation of dNTP Master Mix**

- Prepare a dNTP Master Mix for DNA synthesis as follows: Mix equal volumes of all separate dNTP solutions in a new nuclease-free microcentrifuge tube. The final solution has a concentration of 25mM of each dNTP, which corresponds to a 100x working concentration.
- We suggest the use of 0.5 μl dNTP Master Mix in a 50 μl PCR reaction.

### **Quality Control**

PureStrand  $^{\text{\tiny TM}}$  100mM dNTP Set is tested extensively for contamination prior to release. PureStrand  $^{\text{\tiny TM}}$  dNTPs are >99% pure by HPLC and are free of DNase, RNase, Protease, phosphatase and nicking activity.

## Limitations of Use

This product is intended for research purposes and is not intended for any animal or human therapeutic use.