

# Instructions for Use





## Life Science Kits & Assays



inNucleotide Set

## 1 Product and order number

Name	Amount	Order-no.
inNucleotide Set	4x 250 µl	845-AS-1100250

Component		Volume	Concentration	Amount
dATP		250 µl	100 mM	25 µmol
dCTP		250 µl	100 mM	25 µmol
dGTP		250 µl	100 mM	25 µmol
dTTP		250 µl	100 mM	25 µmol

## 2 Storage conditions

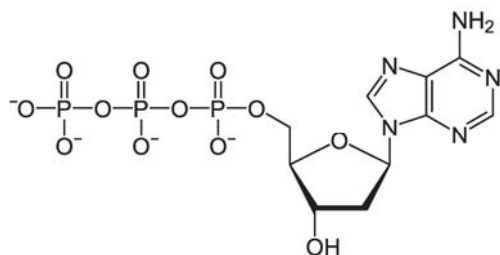
Store 50x inNucleotide Set at -22 to -18 °C in a freezer with constant temperature conditions.

When stored as recommended, the inNucleotide Set is stable until the expiration date printed on the label on the kit box.

### 3 Product specifications

inNucleotide Set is a Set of dATP, dCTP, dGTP and dTTP in a concentration of 100 mM each. The solution is ready to use and the total amount of dNTP in each tube is 25  $\mu\text{mol}$ .

#### dATP

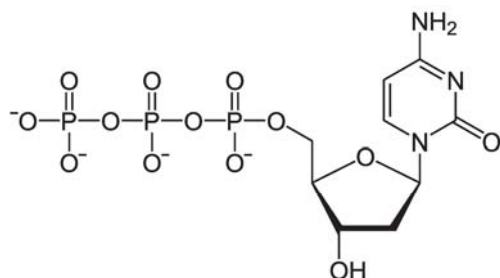


2'-Desoxyadenosine-5'-triphosphate,  
Tetrasodium salts

Molecular formula:  $\text{C}_{10}\text{H}_{12}\text{N}_5\text{O}_{12}\text{P}_3$

Molecular weight:  $491.18 \text{ g mol}^{-1}$

#### dCTP

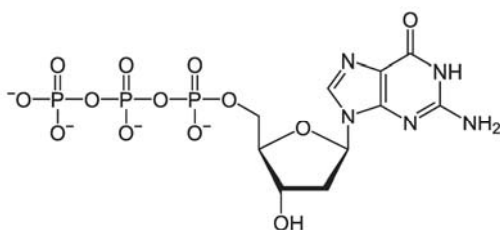


2'-Desoxycytidine-5'-triphosphate,  
Tetrasodium salts

Molecular formula:  $\text{C}_9\text{H}_{12}\text{N}_3\text{O}_{13}\text{P}_3$

Molecular weight:  $467.16 \text{ g mol}^{-1}$

#### dGTP

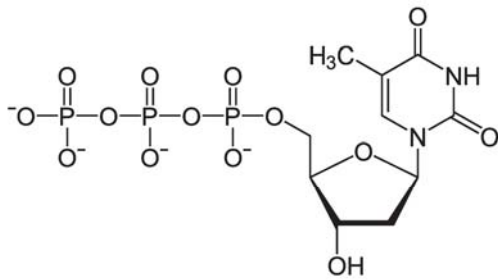


2'-Desoxguanosine-5'-triphosphate,  
Tetrasodium salts

Molecular formula:  $\text{C}_{10}\text{H}_{12}\text{N}_5\text{O}_{13}\text{P}_3$

Molecular weight:  $467.16 \text{ g mol}^{-1}$

## dTTP



2'-Desoxythymidine-5'-triphosphate,  
Tetrasodium salts

Molecular formula:  $C_{10}H_{13}N_2O_{14}P_3$

Molecular weight:  $482.17 \text{ g mol}^{-1}$

## Quality data

- Tetrasodium salts
- Purity > 98% (RP-HPLC)
- DNase-free
- RNase-free
- Protease-free
- Free of inhibitors
- Tested in DNA amplification of 30 kb fragments and in real-time application

## Applications

- In vitro DNA synthesis

### 4 Safety precautions

The assay shall only be handled by educated personal in a laboratory environment. The compliance with the specified procedure is absolutely mandatory when performing this assay.

Reagents should be stored in their original containers at the indicated temperatures. Do not replace individual components with those from different batches or test assays. Note the indicated expiration dates.

Do not eat, drink or smoke while performing the assay.

Wear protective clothing and safety gloves.

All samples and test materials should be handled and disposed of as infectious material, in accordance with regulatory requirements.

Reagent containers that have not come in contact with potentially infectious material may be disposed of along with ordinary laboratory waste.

Store the reagents used for performing PCR separately from DNA templates and amplification products.

## 5 Reagent preparation

Prepare a master mix for in vitro DNA amplification as follows:

Mix equal volumes of all separate dNTP solutions in a suitable reaction tube. The resulting solution has a concentration of 25 mM of each dNTP. Further dilution with molecular biology grade water is possible.

Using 0.5  $\mu\text{l}$  of the 25 mM mix in a total reaction volume of 50  $\mu\text{l}$  will result in a final concentration of 250  $\mu\text{M}$  of each dNTP which is commonly used.

## 6 Hints and Notes

- Gently vortex and briefly centrifuge all solutions after thawing
- After pipetting mix the components of the reaction mix by gently vortexing and briefly centrifuge for a few seconds to collect the mixture at the bottom of the tube.

## 7 Related products

Product	Order Number
50x inNucleotide Mix	845-AS-9000100
6x Loading Dye Orange G	845-ST-4010006
6x Loading Dye Bromophenol Blue	845-ST-3010006
innuSTAR 100 bp DNA Ladder Express	845-ST-1010500
innuSTAR 1kb DNA Ladder Express	845-ST-1020500
innuTaq DNA Polymerase	845-EZ-1000500
innuTaq HOT-A DNA Polymerase	845-EZ-3000500

Publication No.: HB\_AS-1100\_e\_170908

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