

Instructions for Use

Life Science Kits & Assays



50x inNucleotide Mix

1 Product and order number

| Name | Amount | Order-no. |
|----------------------|-----------|----------------|
| 50x inNucleotide Mix | 2x 500 µl | 845-AS-9000100 |

2 Storage conditions

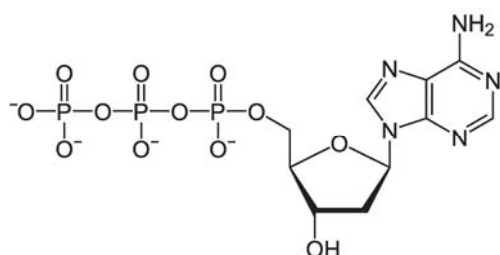
Store 50x inNucleotide Mix at -22 to -18 °C in a freezer with constant temperature conditions.

When stored as recommended, the 50x inNucleotide Mix is stable until the expiration date printed on the label on the kit box.

3 Product specifications

50x inNucleotide Mix is a 50fold concentrated mix of dATP, dCTP, dGTP and dTTP in a concentration of 12.5 mM each. The solution is ready to use and the total amount of dNTP in each tube is 25 μmol (6.25 μmol of each dNTP).

dATP

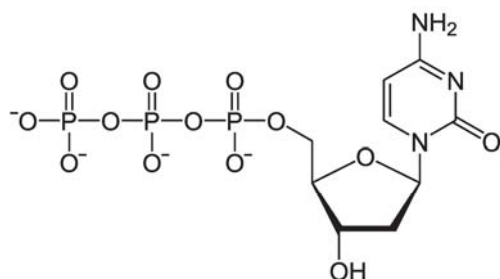


2'-Desoxyadenosine-5'-triphosphate,
Tetrasodium salts

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

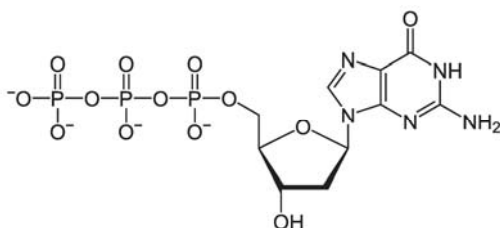


2'-Desoxycytidine-5'-triphosphate,
Tetrasodium salts

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



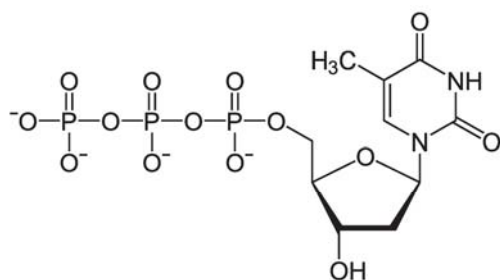
2'-Desoxguanosine-5'-triphosphate,
Tetrasodium salts

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

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

Product specifications

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

For direct use for DNA amplification *in vitro*. Add the 50x inNucleotide Mix directly into the reaction mixture as follows:

| Total reaction volume | Add volume of 50x inNucleotide Mix | Number of reactions |
|-----------------------|------------------------------------|---------------------|
| 25 μ l | 0,5 μ l | 2000 |
| 50 μ l | 1 μ l | 1000 |
| 100 μ l | 2 μ l | 500 |

Using the 50x inNucleotide Mix as described in the table above the final concentration of dNTP's in the reaction mixture is adjusted to 250 μ M of each dNTP.

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 |
|------------------------------------|----------------|
| inNucleotide Set (100 mM) | 845-AS-1100250 |
| 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 |

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