

Genaxxon BioScience

dNTP Sets and dNTP Mastermixes

fon:
 +49 (0)7357 - 91 63 77
 fax:
 +49 (0)7357 - 91 63 78
 eMail:
info@genaxxon.com
 internet:
www.genaxxon.com

Cat #	Description
M3015.4020	Set* of 4 x 20 µmol dA, dC, dG, dT solution adjusted to pH 7.0, 100 mM** Na-salt in 200 µL.
M3015.4100	Set* of 4 x 100 µmol dA, dC, dG, dT solution adjusted to pH 7.0, 100 mM** Na-salt in 1 mL.
M3015.4500	Set* of 4 x 500 µmol dA, dC, dG, dT solution adjusted to pH 7.0, 100 mM** Na-salt in 5 x 1 mL.
M3016.0200	Mix of 4 x 10 µmol dA, dC, dG, dT. 10 mM solution adjusted to pH 7.0 (200 µL).
M3016.1010	Mix of 4 x 50 µmol dA, dC, dG, dT. 10 mM solution adjusted to pH 7.0 (1 mL).
M3017.1002	Mix of 4 x 10 µmol dA, dC, dG, dT. 2 mM solution adjusted to pH 7.0 (1 mL).
M3017.5002	Mix of 4 x 50 µmol dA, dC, dG, dT. 2 mM solution adjusted to pH 7.0 (5 x 1 mL).

* Each Set contains 4 tubes with separate dATP, dCTP, dGTP and dTTP solutions. Each tube contains a solution that is 100 mM of the respective dNTP. The tubes are labelled with the catalogue number of the respective dNTPs (dATP = M3018; dCTP = M3019; dGTP = M3020; dTTP = M3021)

Genaxxon offers a complete range of nucleoside-5'-triphosphates in highly purified form in different convenient solutions. The dNTP mixes are ready-to-use for DNA-polymerisation reactions, all DNA labelling- and sequencing reactions. The dNTP mixes are designed to save time and prevent the possibility for contamination by reducing pipetting steps.

All solutions are prepared using the following substances:

dATP Na₄ x 3 H₂O , deoxyadenosine 5'-triphosphate tetrasodium salt. Purity of substance: 97.0% (UV); 97.5% (HPLC).	Cat #: M3402
dCTP Na₄ x 3 H₂O , deoxycytidine 5'-triphosphate tetrasodium salt. Purity of substance: 97.0% (UV); 96.5% (HPLC).	Cat #: M3401
dGTP Na₄ x 3 H₂O , deoxyguanosine 5'-triphosphate tetrasodium salt. Purity of substance: 99.0% (UV); 97.5% (HPLC).	Cat #: M3403
dTTP Na₄ x 3 H₂O , thymidine 5'-triphosphate tetrasodium salt. Purity of substance: 99.0% (UV); 98.5% (HPLC).	Cat #: M3400

Usage

Please prepare a 10 mM solution of the dNTPs and use 1 µL of the resulting dNTP-solutions for a 50 µL PCR reaction. It is also possible to use the Genaxxon dNTP-Mix (M3016) that is prepared as a 10 mM ready-to-use Mastermix solution.

Alternatively you can prepare a 2 mM solution of the dNTPs and use 5 µL for a 50 µL PCR reaction. It is also possible to use the Genaxxon dNTP-Mix (M3017) that is prepared as a 2 mM ready-to-use solution.

Storage

dNTPs are stable at -20°C / -70°C in a constant-temperature freezer. Avoid multiple thawing/freezing. For long term usage we recommend to aliquot nucleotides.

fon:
 +49 (0)7357 - 91 63 77
 fax:
 +49 (0)7357 - 91 63 78
 eMail:
info@genaxxon.com
 internet:
www.genaxxon.com

Standard DNA amplification assay

Suggested usage for the Genaxxon dNTP-set and dNTP-Mastermix solutions

The 100 mM dNTP-Sets have to be diluted before use in PCR reactions.

If a 10 mM Mastermix is wanted pipet 100 μ L of each dNTP (100 mM) to one tube and add 600 μ L of DNase and RNase free water. The final concentration will be 40 mM total, respective 10 mM of each dNTP.

If a 2 mM Mastermix is wanted pipet 20 μ L of each dNTP (100 mM) to one tube and add 920 μ L of DNase and RNase free water. The final concentration will be 8 mM total, respective 2 mM of each dNTP.

Mix solution well before further usage. We suggest to aliquote the Mixes to prevent repeated freeze - thaw cycles.

The Genaxxon dNTP ready-to-use solutions are excellent for direct use without any further dilution in DNA synthesis reaction. Just add the dNTP-Mastermixes directly to the reaction mixes as follows.

Table 1: suggested dNTP-Mastermix volumes per PCR reaction (1 mL 10 mM dNTP-Mix (M3016.1010))

Final reaction volume	Added volume of 10 mM dNTP-Mix	Number of PCR reactions
10 μ L	0.2 μ L	5000
25 μ L	0.5 μ L	2000
50 μ L	1.0 μ L	1000
100 μ L	2.0 μ L	500

Table 2: suggested dNTP-Mastermix volumes per PCR reaction (1 mL of 2 mM dNTP-Mix (M3017.1002))

Final reaction volume	Added volume of 10 mM dNTP-Mix	Number of PCR reactions
10 μ L	1.0 μ L	1000
25 μ L	2.5 μ L	400
50 μ L	5.0 μ L	200
100 μ L	10.0 μ L	100

Notes:

As all dNTP solutions should not be thawed several times, we suggest to prepare aliquots of each solution.

Related Products

Cat #	Description
M3022	100 mM dUTP solution. Available in package sizes of 20 μ mole, 100 μ mole and 500 μ mole.
M3096	Uracil-DNA-Glycosylase. Available in package sizes of 200 units and 1000 units.