

www.smobio.com

Product Information SMO0	Chem™ Series
--------------------------	--------------

dUTP Solution - Sodium Salt

CD7000	100 mM	25 ml
CD7001	100 mM	100 ml
CD7002	100 mM	5 ml
CD7003	100 mM	1 ml

Storage

-20°C for 36 months

Applications

- PCR
- Avoid carryover contamination between PCRs to eliminate a source of false positives.

Description

Ultrapure dUTP (2´-Deoxyuridine, 5´-Triphosphate) supplied as sodium salt in purified water (pH 8.5). dUTP can be used in place of dTTP in PCR and RT-PCR protocols to prevent carryover from previous amplifications. The substitution of dUTP for dTTP in PCR results in uracil-containing PCR products that are suitable for most standard applications. The enzyme uracil-N-glycosylase (UNG, also referred to as UDG) can be added to a PCR premix to excise uracil from any contaminating PCR product, thereby preventing false positives. Each lot of dUTP is tested to ensure specific DNA amplification and the absence of nuclease activity.

Features

- Ideal for PCR amplification and cDNA synthesis
- Nuclease and ribonuclease free

Structural formula

Preparation Note

Working solution: We recommend to prepare a deoxynucleotide mix containing dATP, dCTP, dGTP (10 mM, each), dUTP (20 mM); (e.g., for the preparation of 100 µl nucleotide mix add 10 µl of dATP, dCTP, dGTP (each) and 20 µl dUTP to 50 µl Water, PCR grade).

Quality Control

Method	Specification	Result
Purity assay (HPLC)	≥ 99%	Pass
Nuclease activity	Not detectable	Pass
Ribonuclease activity	Not detectable	Pass
Protease activity	Not detectable	Pass
Nicking activity	Not detectable	Pass
Functional assay (PCR)	Amplify 665 bp and 20 kb amplicons	Pass
Functional assay (RT-PCR)	Synthesize cDNA	Pass

Other Information

SMOBIO Technology, Inc. claims all warranties with respect to this document, expressed or implied, including but not limited to those of merchantability or fitness for a particular purpose. In no event shall SMOBIO Technology, Inc. be liable, whether in contract, tort, warranty, or under any statute or any other basis for special, incidental, indirect, punitive, multiple or consequential damages in connection with or arising from this document, including but not limited to the use thereof.

The latest version of the manual can be downloaded from www.smobio.com/shop.

For research only 2024 ver. 1.4.0