

**SMOChem<sup>™</sup> Series** 

# **Product Information**

# **dUTP Solution - Sodium Salt**

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



Structural formula

#### Storage

-20°C for 24 months

#### 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

#### Applications

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

# **Preparation Note**

Working solution: We recommend to prepare a deoxynucleotide mix containing dATP, dCTP, dGTP (10 mM, each), dUTP (30 mM); (e.g., for the preparation of 100  $\mu$ l nucleotide mix add 10  $\mu$ l of dATP, dCTP, dGTP (each) and 30  $\mu$ l dUTP to 40  $\mu$ l 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 1 kb amplicons	Pass

For research only

2019 ver. 1.1.1 P06-F11-A1