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## Product Data Sheet

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Product Name: Biotin-11-dCTP

Cat. No.: GB20017

### Chemical Properties

Cas. No.

Formula  $C_{28}H_{44}N_7O_{16}P_3S$  (free acid) M.Wt 859.67 (free acid)

Solubility Storage Store at  $-20^{\circ}C$  or below

General tips For obtaining a higher solubility, please warm the tube at  $37^{\circ}C$  and shake it in the ultrasonic bath for a while. Stock solution can be stored below  $-20^{\circ}C$  for several months.

Shipping Condition Evaluation sample solution: ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure

### Background

Biotin-11-dCTP is enzymatically incorporated into DNA/cDNA as substitute for its natural counterpart dCTP. The resulting Biotin-labeled DNA/cDNA probes are subsequently detected using streptavidin conjugated with horseradish peroxidase (HRP), alkaline phosphatase (AP), a fluorescent dye or agarose/magnetic beads. Optimal substrate properties and thus labeling efficiency as well as an efficient detection of the Biotin moiety is ensured by a 11-atom linker attached to the C5 position of cytidine.

Recommended Biotin-11-dCTP/dCTP ratio for PCR and Nick Translation: 50% Biotin-11-dCTP/ 50% dCTP Please note: The optimal final concentration of Biotin-11-dCTP may vary depending on the application and assay conditions. For optimal product yields and high incorporation rates an individual optimization of the Biotin-11-dCTP/dCTP ratio is recommended.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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