Bio-16-dUTP

Bio-16-dUTP (Biotin-16-2'-deoxyuridine-5'-triphosphate) can replace TTP in reactions in which it serves as a substrate for *E. coli* DNA polymerase (holoenzyme and Klenow fragment), T4 and Taq DNA polymerases, reverse transcriptase (from AMV and M-MuLV) and terminal transferase. Bio-16-dUTP can be used to produce biotinylated DNA probes in a variety of labeling reactions including nick translation, random prime labeling, cDNA labeling and 3'-end labeling. The resulting biotin-labeled probe can be used in a variety of hybridization applications incuding Southern blots, Northern blots, or dot blots. The probes can also be used for *in situ* hybridization procedures on fixed cells and tissues. The biotinylated probes have been shown to hybridize to homologous nucleic acid at the same rate and to the same extent as non-biotinylated probes. The hybridized biotinylated DNA probes can be detected by their interaction with biotin-binding proteins, such as avidin, streptavidin or antibodies coupled to fluorescent dyes or color-producing enzymes.

This labeled dUTP can be used with the Nick Translation DNA Labeling System 2.0 (Prod. No. ENZ-GEN111).

Citations: 4

View Online »

Ordering Information

Order Online »

ENZ-42811

50nmol

Manuals, SDS & CofA

View Online »



Handling & Storage

Use/Stability As indicated on product label or CoA when stored as recommended.

Handling Avoid freeze/thaw cycles.

Long Term Storage -20°C

Shipping Dry Ice

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name Biotin-16-2'-deoxyuridine-5'-triphosphate

Appearance Clear, colorless liquid.

Concentration 1mM

Extinction Coefficient 10,700 M-1 cm-1 (240 nm, pH 7.0)

Formula $C_{32}H_{52}N_7O_{18}P_3S$

Formulation Liquid. Solution in water.

MW 947.7 (free acid)

Purity ≥93% (HPLC)

Purity Detail Contains <5% Bio-16-dUDP.

Quantity Sufficient for approximately 50 reactions, following the

recommended protocol of Prod. No. ENZ-GEN111.

Technical Info / Product Notes

The Bio-16 dUTP linker that physically connects Biotin to the nucleotide is longer than that of Bio-11 dUTP.

The accessibility of the biotin moiety is influenced by the linker length allowing more favorable interaction

with biotin-binding proteins.

Several of Enzo's products and product applications are covered by US and foreign patents and patents pending.

Last modified: May 29, 2024



info-

eu@enzolifesciences.com