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).

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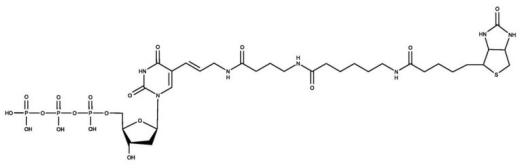
ENZ-42811	50nmol

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.

ENZO LIFE SCIENCES, INC.
Phone: 800.942.0430
info-usa@enzolifesciences.com

European Sales Office
ENZO LIFE SCIENCES (ELS) AG
Phone: +41 61 926 8989
info-eu@enzolifesciences.com

Belgium, The Netherlands & Luxembourg
Phone: +32 3 466 0420
info-be@enzolifesciences.com

France
Phone: +33 472 440 655
info-fr@enzolifesciences.com

Germany
Phone: +49 7621 5500 526
info-de@enzolifesciences.com

UK & Ireland
Phone (UK customers): 0845 601 1488
Phone: +44 1392 825900
info-uk@enzolifesciences.com