

Product Information Sheet

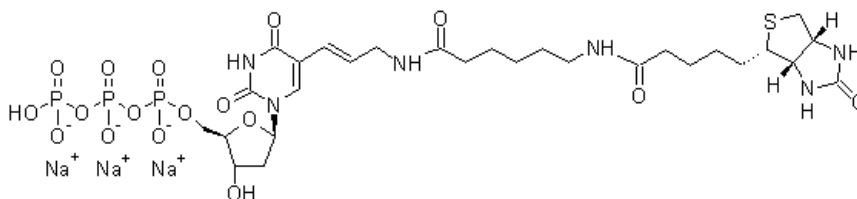
Ordering Information

Product Number: 17016
Product Name: Biotin-11-dUTP *1 mM in Tris Buffer (pH 7.5)*
Unit Size: 25 nmoles
Storage Conditions: <-15 °C and kept from light and moisture
Expiration Date: 12 months upon receiving

Chemical and Spectral Properties

Molecular Weight: 928.62

Chemical Structure:



Soluble in: Water
Excitation Wavelength: NA
Emission Wavelength: NA

Application Notes

The biotin-modified deoxyuridine 5'-triphosphates are widely used for a variety of non-radioactive DNA labeling reactions including nick translation, random prime labeling, cDNA labeling and 3'-end labeling. 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 avidin and streptavidin. Biotin-11-dUTP can be enzymatically incorporated into DNA via nick-translation, random priming, 3'-end terminal labeling or in the process of PCR. The number '11' is the number of carbon atoms in the backbone of the linker between dUTP and biotin. The longer the linker is, the more effective interaction of biotin with avidin occurs. On the other hand, the shorter the linker is, the more effective incorporation of dUTP into DNA. It is suggested the length of linker '11' is optimal for the majority of applications. Bio-11-dUTP is used to produce biotinylated DNA probes in a variety of hybridization applications including Southern blots, Northern blots, dot blots, fixed cells and tissues.