

# Biotin-11-dATP \*1 mM in Tris Buffer (pH 7.5)\*

Catalog Number: 17014 Unit Size: 25 nmoles

#### **Product Details**

Storage Conditions Freeze (< -15 °C), Minimize light exposure,

Expiration Date 6 months upon recieving

### **Chemical Properties**

Appearance Liquid white

Molecular Weight 882.71

Soluble In Water

**Chemical Structure** 

## **Spectral Properties**

Excitation Wavelength N/A

Emission Wavelength N/A

#### **Applications**

Botin-modified deoxyadenosine 5'-triphosphates are widely used for various non-radioactive DNA labeling reactions, including nick translation, random prime labeling, cDNA labeling, and 3'-end labeling. Biotinylated probes have been shown to hybridize with homologous nucleic acid at the same rate and extent as non-biotinylated probes. The hybridized biotinylated DNA probes can be detected by avidin and streptavidin. Biotin-11-dATP \*1 mM in Tris Buffer (pH 7.5)\* can be enzymatically incorporated into DNA via nick-translation, random priming, 3'-end terminal labeling, or during PCR. The number '11' refers to the number of carbon atoms in the backbone of the linker between dATP and biotin. The more effective interaction between biotin and avidin will occur with longer linkers, whereas shorter linkers will lead to more efficient incorporation of dATP into DNA. It is suggested that the linker '11' length is optimal for most applications. Biotin-11-dATP \*1 mM in Tris Buffer (pH 7.5)\* produces biotinylated DNA probes in various hybridization applications, including Southern blots, Northern blots, dot blots, fixed cells, and tissues. It is chemically equivalent to NEL540001EA of PerkinElmer (PE).