

iFluor® 350-dUTP *1 mM in TE Buffer (pH 7.5)*

Catalog Number: 17045
Unit Size: 25 nmoles

Product Details

Storage Conditions	Freeze (< -15 °C), Minimize light exposure
Expiration Date	6 months upon receiving

Chemical Properties

Appearance	Liquid
Molecular Weight	N/A
Soluble In	Water
Chemical Structure	 <p>The chemical structure of iFluor350 is a derivative of glucose-1-phosphate. It features a glucose ring with a phosphate group at the C1 position. Attached to the C6 position of the glucose ring is a 350 nm fluorophore, which consists of a pyrazole ring substituted with a 350 nm chromophore and a terminal alkyne group.</p>

Spectral Properties

Excitation Wavelength 345 nm
Emission Wavelength 450 nm

Applications

Dye-modified deoxyuridine 5'-triphosphates are widely used for the production of dye-labeled DNA via conventional enzymatic incorporation techniques, including reverse transcription, nick translation, random primed labeling, and PCR. These enzymatic fluorescence labeling methods are commonly employed in both fluorescence *in situ* hybridization (FISH) probes and microarray-based experiments. The iFluor® 350-dUTP conjugate, which emits blue fluorescence, is compatible with the SpectrumBlue™ filter set (SpectrumBlue™ is a trademark of Vysis). Compared to commonly used blue fluorescent dNTPs such as AMCA-6-dUTP, iFluor® 350 provides a significantly brighter signal, greater photostability, and is less affected by pH variations.