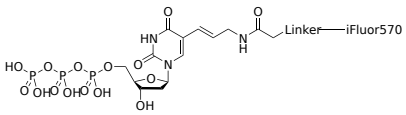
iFluor® 570-dUTP *1 mM in TE Buffer (pH 7.5)*

Catalog Number: 17048
Unit Size: 25 nmoles

Product Details

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

Chemical Properties

Appearance	Liquid red
Molecular Weight	1435.30
Soluble In	Water
Chemical Structure	

Spectral Properties

Excitation Wavelength	557 nm
Emission Wavelength	570 nm

Applications

iFluor® 570-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® 570-dUTP conjugate, which emits yellow fluorescence, is compatible with the SpectrumOrange™ filter set (SpectrumOrange™ is a trademark of Vysis). Compared to Alexa Fluor® 546-labeled dNTPs, iFluor® 570 offers a significantly brighter signal, enhanced photostability, and greater resilience to pH fluctuations, maintaining stability even in higher pH conditions (e.g., pH 8-10, commonly used in DNA sequencing).