

Product Datasheet

HighFidelity Fluorescein PCR Labeling Kit (orb653775)

Catalog Number	orb653775
Category	Assays and Kits
Description	<p>HighFidelity Fluorescein PCR Labeling Kit is designed to produce randomly Fluorescein-modified DNA probes by PCR. Such probes are ideally suited for Fluorescence in situ hybridization (FISH) and Northern Blot experiments. PCR-based labeling is superior to random-primed labeling with Klenow fragment if template amounts are limited or amplification of a specific DNA fragments is required. Amplification of probes up to 4 kbp is feasible. Fluorescein-12-dUTP is efficiently incorporated into DNA as substitute for its natural counterpart dTTP using an optimized reaction buffer and a High Fidelity Polymerase blend consisting of Taq polymerase and a proofreading enzyme. 50% Fluorescein-12-dUTP substitution typically results in an optimal balance between reaction and labeling efficiency. Individual optimization of Fluorescein-12-dUTP/dTTP ratio however, can easily be achieved with the single nucleotide format. The kit contains sufficient reagents for 10 labeling reactions (S-Pack) or 50 labeling reactions (L-Pack) of 20 µl each (50% Fluorescein-12-dUTP substitution, 100 µM dATP/dGTP/dCTP, 50 µM dTTP, 50 µM Fluorescein-12-dUTP).</p>
Application notes	<p>Spectroscopic Properties: λ_{exc} 492 nm, λ_{em} 517 nm, ϵ 83.0 L mmol⁻¹ cm⁻¹ (Tris-HCl pH 7.5).</p>
SMILES	<chem>O=C1CCC2C(C1)OC1CC(O)CCC1C2C1C(CCC(C1)C(=O)NCCCCC(=O)NC/C=C/C1CN(C(=O)[nH]c1=O)[C@@H]1O[C@H](COP(=O)(O)OP(=O)(O)OP(=O)(O)O)[C@@H](O)C1)C(=O)O.O=C1C(CN(C(=O)[nH]1)[C@@H]1O[C@H](COP(=O)(O)OP(=O)(O)OP(=O)(O)O)[C@@H](O)C1)/C=C/CNC(=O)CCCCNC(=O)c1cc(c(c2c3ccc(O)cc3oc3cc(=O)ccc23)cc1)C(=O)O</chem>
Storage	store at -20 °C
Note	For research use only

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Expiration Date

12 months from date of receipt.

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