

## Product Datasheet

# HighFidelity ORANGE PCR Labeling Testkit (orb692242)

<b>Catalog Number</b>	orb692242
<b>Category</b>	Tools
<b>Description</b>	<p>HighFidelity ORANGE PCR Labeling Testkit is designed to produce randomly AF594-, ATTO594- and TexasRed-modified DNA probes by PCR to find the optimal label for the orange emission wavelength range. 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. All labeled-dUTP are efficiently incorporated into DNA as sub-stitute 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%/25% labeled-dUTP substitution typically results in an optimal balance between reaction and labeling efficiency. Individual optimization of labeled-dUTP/dTTP ratio however, can easily be achieved with the single nucleotide format.</p>
<b>Application notes</b>	<p><b>Spectroscopic Propertie:</b> AF594: <math>\lambda_{exc}</math> 590 nm, <math>\lambda_{em}</math> 617 nm, <math>\epsilon</math> 92.0 L mmol<sup>-1</sup> cm<sup>-1</sup> (Tris-HCl pH 7.5), ATTO594: <math>\lambda_{exc}</math> 602 nm, <math>\lambda_{em}</math> 626 nm, <math>\epsilon</math> 120.0 L mmol<sup>-1</sup> cm<sup>-1</sup> (Tris-HCl pH 7.5), TexasRed: <math>\lambda_{exc}</math> 583 nm, <math>\lambda_{em}</math> 603 nm, <math>\epsilon</math> 112.0 L mmol<sup>-1</sup> cm<sup>-1</sup> (Tris-HCl pH 7.5).</p>
<b>Storage</b>	store at -20 °C
<b>Hazard Information</b>	Non-Toxic
<b>Note</b>	For research use only
<b>Expiration Date</b>	12 months from date of receipt.

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