

Data Sheet (25.05.2011)

# Biotin PCR Labeling Master

## 2x Master Mix for DNA labeling

Cat.-No.	Amount.
mi-N1351S-BIO	100 rx
mi-N1351L-BIO	500 rx

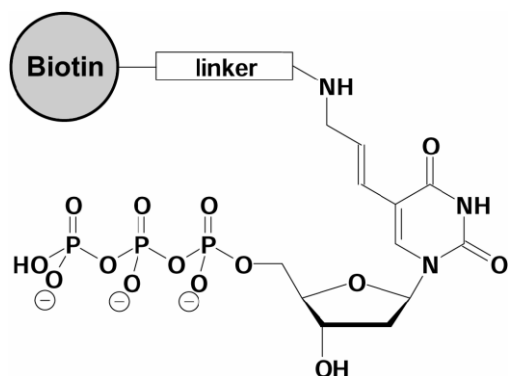
Only for *in vitro* use!  
For research only!

### Biotin PCR Labeling Master (red cap)

2x conc. master mix containing Taq Polymerase, dATP, dCTP, dGTP, dTTP, Biotin-dUTP, High Yield Buffer and stabilizers

### PCR-grade water (white cap)

### Structure



Biotin-dUTP, Biotin is attached via an optimized linker to aminoallyl-dUTP

Store at -20 °C in the dark  
Avoid frequent thawing and freezing  
Under these storage conditions, a guarantee of 12 months after delivery is given.

### Description

Biotin PCR Labeling Master contains all reagents required for DNA labeling in a premixed 2x concentrated ready-to-use solution. The Master Mix ensures fast and easy preparation with a minimum of pipetting steps providing an easy-to-perform and rapid labeling technology.

The mix allows the direct incorporation of labeled nucleotides into DNA by PCR. Its high labeling efficiency is based on the specially adapted BiotindUTP complex in combination with an optimized buffer system.

In PCR labeling, repeated cycles of denaturation, annealing and extension allow the amplification of a specific DNA fragment. When dTTP is partially substituted by Biotin-dUTP the extension of the annealed primers with *Taq* Polymerase generates Biotin-labeled double-stranded DNA.

The resultant DNA is suited for a variety of hybridization experiments, including Southern and Northern blots, colony hybridizations and *in situ* hybridizations.

### Recommended PCR assay

Prepare the following reaction mixture in a sterile vial, adding the enzyme last.

20 µl PCR labeling assay		
10 µl	Biotin PCR Labeling Master, 2x conc.	red cap
1 µl	forward Primer (10 µM)	
1 µl	reverse Primer (10 µM)	
0.1-10 ng	Template DNA	
fill up to 20 µl	PCR-grade water	white cap

Vortex the mix gently to assure homogeneity and centrifuge briefly to collect the reaction at the bottom of the tube. Place the tube in a thermocycler.