BIO-PROBE® 3'-Oligonucleotide labeling system reagent pack

The procedure for labeling of DNA probes with a polynucleotide "tail" containing hapten-labeled nucleotides was developed by Enzo. In such terminal labeling reactions, terminal transferase catalyzes the addition of nucleotides to any 3'-OH terminus in a template independent manner. This rapid and convenient nonradioactive labeling procedure is free of any sequence bias that is normally observed in random priming or nick translation reactions. Terminal labeling is an ideal procedure for the labeling of oligonucleotides.

An oligonucleotide can be synthesized using standard, commercially available reagents and labeled after synthesis in a simple and reproducible enzyme reaction. The BIO-PROBE® 3'-Oligonucleotide Labeling System provides maximum flexibility for labeling oligonucleotides approximately 15 to 100 nucleotides in length. A standard reaction will label up to 100 picomoles (1µg of a 30-mer oligonucleotide sequence). A complete system combines a standard Reagent Pack (buffers and enzyme) with a Nucleotide Pack. All components contain sufficient reagents for 25 labeling reactions.

The system is available in two modular formats:

- 3'-Oligonucleotide Tailing (with a "tail" of nucleotides)
- 3'-Oligonucleotide Labeling (with a single nucleotide)

The BIO-PROBE[®] 3'-Oligonucleotide Labeling System Reagent Pack contains all reagents required for labeling except nucleotides. For optimun results, the reagents contained in this Pack should be used with the appropriate Nucleotide Pack.

Citations: 1

View Online »

Ordering Information

Order Online »

ENZ-42730

25Reactions

Manuals, SDS & CofA

View Online »

Handling & Storage

Use/Stability As indicated on product label or CoA when stored as recommended. Stable for at least

one year after receipt when stored as recommended.

Long Term Storage -20°C

Shipping Dry Ice

Regulatory Status RUO - Research Use Only

Product Details

Application Dot Blot, ISH (in situ hybridization), Northern Blot,

Southern Blot

Contents 5X Reaction Buffer, 100 μl Potassium cacodylate buffer,

pH 7, containing β-mercaptoethanol

10X CoCl₂ Solution, 50 µl 10mM solution

Terminal Deoxynucleotide Transferase, 50 µl 30 units/µl

in storage buffer

Control Oligonucleotide (unlabeled), 25 μ l 0.2 μ g/ μ l in TE Buffer (30-mer, 5'-TTG GGT AAC GCC AGG GTT TTC CCA GTC ACG-3', homologous to the lac Z' region of

pUC-type vector DNAs)

Control Target DNA, 25 µl 0.2 µg/µl in TE Buffer

(Restriction enzyme digest of a pUC-type vector containing

an Epstein-Barr Virus DNA insert)

Technical Info / Product NotesBIO-PROBE[®] is a trademark of Enzo Life Sciences, Inc.

Several of Enzo's products and product applications are

covered by US and foreign patents and patents pending.

Last modified: May 29, 2024

