

SPB (NHS-Psoralen)

23013

0821.2

Number

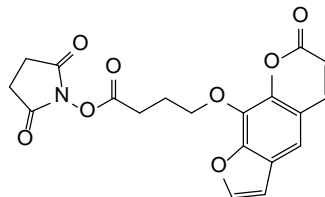
23013

Description
SPB (succinimidyl-[4-(psoralen-8-yloxy)]butyrate), 50mg

Spacer Arm: 8.6Å

Formula: C₁₉H₁₅NO₈

Molecular Weight: 385.32


Storage: Upon receipt store product desiccated at 4°C. Product is shipped at ambient temperature.

Introduction

Thermo Scientific SPB is an amine-reactive and photoreactive heterobifunctional crosslinking reagent. The photoreactive psoralen group provides much greater covalent insertion yields than phenyl azide-containing compounds, which makes this reagent a superior alternative to typical photoreactive NHS-ester crosslinkers. The psoralen tricyclic planar ring system intercalates into double-stranded, and to a lesser extent, single-stranded, DNA, RNA, PCR products, cDNA or oligonucleotides. It also can be used with agarose gel-purified oligonucleotides because the presence of agarose does not interfere with the coupling reaction. The nucleic acid labeling site of the psoralen group (the 5,6 double bond in thymine residues) does not interfere with subsequent hybridization reactions, creating a highly-sensitive direct labeling alternative to radioactive probes.

Important Product Information

- SPB is moisture-sensitive. Store SPB at 4-8°C and desiccated. To avoid moisture condensation onto the product, equilibrate the vial to room temperature before opening.
- Dissolve SPB in organic solvent (e.g., DMF or DMSO) before adding it to an aqueous reaction medium.
- The NHS ester will react with primary amines in molecules at pH 7-9 to form stable amide bonds. Suggested reaction buffer is 0.1M sodium phosphate, 0.15M sodium chloride; pH 7.2 (Product No. 28372). Avoid amine-containing buffers such as Tris or glycine as they will compete with the NHS-ester reaction.
- Photoreactive coupling occurs with high yield after brief exposure to long UV light (>350nm, 10-30 minutes).

Related Thermo Scientific Products

20688	Dimethylsulfoxide (DMSO), Sequanal grade, 950mL
20673	Dimethylformamide (DMF), Sequanal grade, 50mL
20036	Bioconjugate Techniques, 1202 pages, softcover
89882	Zeba™ Spin Desalting Columns, 0.5mL, 25 columns
66382, 66807	Slide-A-Lyzer™ Dialysis Cassette Kits
28372	BupH™ Phosphate Buffered Saline Packs, 40 packs
23225	Pierce BCA Protein Assay Kit

General References

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- Wassarman, D.A. (1993). Psoralen crosslinking of small RNAs *in vitro*. *Molecular Biol Reports* **17**:143-51.

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No other warranties, express or implied, are granted, including without limitation, implied warranties of merchantability, fitness for any particular purpose, or non infringement. Buyer's exclusive remedy for non-conforming Products during the warranty period is limited to replacement of or refund for the non-conforming Product(s).

There is no obligation to replace Products as the result of (i) accident, disaster or event of force majeure, (ii) misuse, fault or negligence of or by Buyer, (iii) use of the Products in a manner for which they were not designed, or (iv) improper storage and handling of the Products.

Current product instructions are available at www.thermoscientific.com/pierce. For a faxed copy, call 800-874-3723 or contact your local distributor.

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