



A Geno Technology, Inc. (USA) brand name

# **Bolton-Hunter Reagent**

**Sulfo-SHPP** 

(Cat. # BC92)



### INTRODUCTION

G-Biosciences water-soluble Bolton-Hunter Reagent (Sulfo-SHPP) conjugates tyrosine-like groups to end-terminal  $\alpha$ -amino groups or  $\epsilon$ -amino groups of lysine to increase the number of tyrosyl groups that can be iodinated by iodine-125 labeling procedures.

Radioactive iodine (<sup>125</sup>I) is routinely used by researchers to label proteins. The iodination of proteins can be performed enzymatically or chemically. The Bolton-Hunter reagent is designed to aid the labeling of proteins with radioactive iodine.

## ITEM(S) SUPPLIED

Cat.#	Description	Size
BC92	Sulfo SHPP (Water soluble Bolton-Hunter reagent)	100mg

#### STORAGE CONDITIONS

The kit is shipped at ambient temperature. Upon arrival, store at -20°C.

### **SPECIFICATIONS**

- Synonyms: Sulfosuccinimidyl-3-(4-hydroxyphenyl) propionate; Sulfo SHPP; Water Soluble Bolton-Hunter Reagent
- CAS Number: 106827-57-0
- Molecular Weight: 365.3
- Ideal for proteins with masked or no tyrosine residues
- Optimal reaction at pH 8.5
- Water soluble

#### PROTOCOL FOR IODINATION OF A PURIFIED PROTEIN

The following protocol is a guide to modifying a protein before iodination.

## Material required

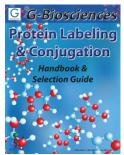
- 200mM borate buffer, pH9.0 (Modification buffer)
- Protein
- Phosphate Buffered Saline [1X] (Cat. # 786-377)
- 1. Dissolve 190mg of protein in 2ml 200mM borate buffer, pH9.0.
- 2. Immediately before use dissolve 5mg of Water-Soluble Bolton-Hunter Reagent in 1ml 200mM borate buffer, pH9.0.

**NOTE**: Alternatively, add 0.5mg directly to the protein solution and then go to step 4.

- 3. Add 100µl sulfoSHPP solution to the protein solution.
- 4. Incubate on ice for 3 hours with periodic mixing.
- Remove the non-reacted sulfo-SHPP by dialyzing against PBS or other suitable buffer. We recommend using our Tube-O-DIALYZER<sup>™</sup> to ensure 100% sample recovery
- 6. Radiolabel with <sup>125</sup>I using your established procedures.

#### RELATED PRODUCTS

Download our Protein Conjugation and Labeling Handbook.



http://info2.gbiosciences.com/complete-protein-labeling-conjugation-handbook For other related products, visit our website at www.GBiosciences.com or contact us.

Last saved: 5/19/2015 CMH



www.GBiosciences.com