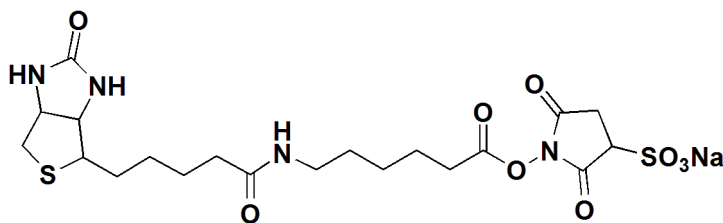


## Sulfo-NHS-LC-Biotin Protocol and Product Information Sheet

Product Category:	Biotinylation Reagents
Catalog Number(s):	<a href="#">b2103-100mg</a> , <a href="#">b2103-1gm</a> , b2103-custom
Product Name:	Sulfo-NHS-LC-Biotin
Alternative Name(s):	Biotinamidohexanoic acid 3-sulfo-N-hydroxysuccinimide ester sodium salt
CAS Number:	127062-22-0
Chemical Formula:	C <sub>20</sub> H <sub>29</sub> N <sub>4</sub> NaO <sub>9</sub> S <sub>2</sub>
Molecular Weight:	556.59
Spacer Length:	22.4 Å
Storage:	Upon receipt store at 4°C or lower under desiccated inert gas (shipped at ambient temperature). Protect from moisture (i.e. humidity).



### **General Sulfo-NHS-LC-Biotin Protein Biotinylation Protocol**

1. Allow vial of Sulfo-NHS-LC-Biotin to equilibrate to ambient temperature before opening.
2. Dissolve protein at a concentration of 1-10 mg/mL in 100 mM sodium phosphate, 150 mM NaCl, pH 7.2-7.5 or other suitable amine-free buffer.
3. Immediately before use, create a 20 mg/mL Sulfo-NHS-LC-Biotin stock solution in water or buffer (same as step 2). Anhydrous [DMF](#) or [DMSO](#) can be used to make a stock solution ahead of time.
4. Add sufficient Sulfo-NHS-LC-Biotin stock solution to the protein solution to obtain 10-20 fold molar excess of biotinylation reagent over protein.  
*Note: Alternatively, an amount of Sulfo-NHS-LC-Biotin can be added to the protein solution required to give 10-20 fold molar excess. Dilute protein solutions (i.e. 1-2 mg/mL) may require increased molar excess of Sulfo-NHS-LC-Biotin (i.e. ≥ 20 fold) to yield similar biotinylation of a more concentrated protein solution.*
5. Allow biotinylation reaction to proceed for 30-60 minutes at room temperature or ≥ 2 hours at 4°C.
6. Desalt biotinylated protein through dialysis or gel filtration with a resin, such as Sephadex® G-25 ([g4109](#)) or equivalent.

### **References:**

Hermanson, G.T. 1996. Bioconjugate Techniques. Academic Press, San Diego, CA, USA.