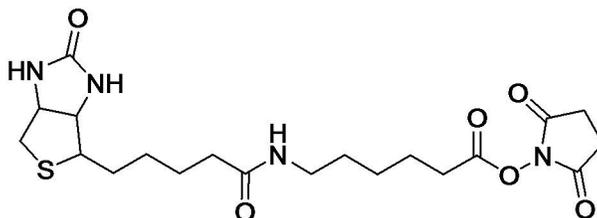


## NHS-LC-Biotin Protocol and Product Information Sheet

Product Category:	Biotinylation Reagents
Catalog Number(s):	<a href="#">b2102-100mg</a> , <a href="#">b2102-1gm</a> , b2102-custom
Product Name:	NHS-LC-Biotin
Alternative Name(s):	Succinimidyl 6-(biotinamido)hexanoate; (+)-Biotinamidocaproate N-hydroxysuccinimidyl ester
CAS Number:	72040-63-2
Chemical Formula:	C <sub>20</sub> H <sub>30</sub> N <sub>4</sub> O <sub>6</sub> S
Molecular Weight:	454.54
Spacer Length:	22.4 Å
Storage:	Upon receipt store at 4°C (shipped at ambient temperature).



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

1. Allow vial of NHS-LC-Biotin to equilibrate to ambient temperature before opening.
2. Dissolve protein at a concentration of 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 40 mg/mL NHS-LC-Biotin stock solution in anhydrous DMF ([cr8106-25ml](#)) or DMSO ([cr8105-25ml](#)).
4. Add sufficient NHS-LC-Biotin stock solution to the protein solution to obtain 10-20 fold molar excess of biotinylation reagent over protein.  
*Note: Dilute protein solutions (i.e. 1-2 mg/mL) may require increased molar excess of 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.