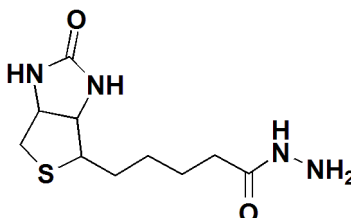


Biotin Hydrazide Protocol and Product Information Sheet

Product Category:	Biotinylation Reagents
Catalog Number(s):	b2106-100mg , b2106-1g , b2106-custom
Product Name:	Biotin Hydrazide
Alternative Name(s):	(+)-Biotin Hydrazide; Biotin-Hz; Hydrazide Biotin; Biotine Hydrazide
CAS Number:	66640-86-6
Chemical Formula:	C ₁₀ H ₁₈ N ₄ O ₂ S
Molecular Weight:	258.34
Spacer Length:	15.7 Å
Storage:	Upon receipt store at 4°C (shipped at ambient temperature).



Product Information

Biotin Hydrazide (Biotin-Hz) is most commonly used for biotinylating carbohydrate moieties after they are oxidized to the aldehyde, forming a hydrazone linkage. Biotin Hydrazide can also be used to biotinylate carboxylic acid groups, with the use of EDC-HCl ([Product # c1100](#)).

Notes: Avoid using primary amine containing buffers, such as Tris.

Biotin Hydrazide Glycoprotein Biotinylation Protocol

1. Immediately before use, dissolve Sodium *meta*-Periodate ([cr8103-5gm](#)) at a concentration of 20 mM in 100mM Sodium Acetate, pH 5.5. Store in crushed ice until use.
2. Dissolve glycoprotein at a concentration of 1-5 mg/mL in cold 100mM Sodium Acetate, pH 5.5.
3. Gently mix the glycoprotein solution with the periodate solution (1:1) (0.5mL to 1mL of each is a typical volume).
4. Allow reaction to proceed at 0-4°C for 30 minutes.
5. Desalt the oxidized glycoprotein through gel filtration (spin format), with a resin such as Sephadex® G-25 to remove excess periodate. Column should first be equilibrated with 50-100 mM Sodium Phosphate buffer, pH 7.0-7.5 to exchange oxidized glycoproteins to the appropriate buffer for conjugation.
6. Dissolve Biotin Hydrazide in DMSO ([cr8105-25ml](#)) at 25-50mM.
7. Once the glycoprotein has been desalted, add sufficient biotinylating reagent to give a 5-10mM Biotin Hydrazide concentration.
8. Allow biotinylation reaction to proceed for 2 hours at room temperature.
9. Remove unreacted material through dialysis or gel filtration with a resin, such as Sephadex® G-25.

References:

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 O'Shannessy, D.J., Quarles, R.H. *J. Immunol. Meth.* 1987, 99, 153-161.
 Hermanson, G.T. 1996. *Bioconjugate Techniques*. Academic Press, San Diego, CA, USA.

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