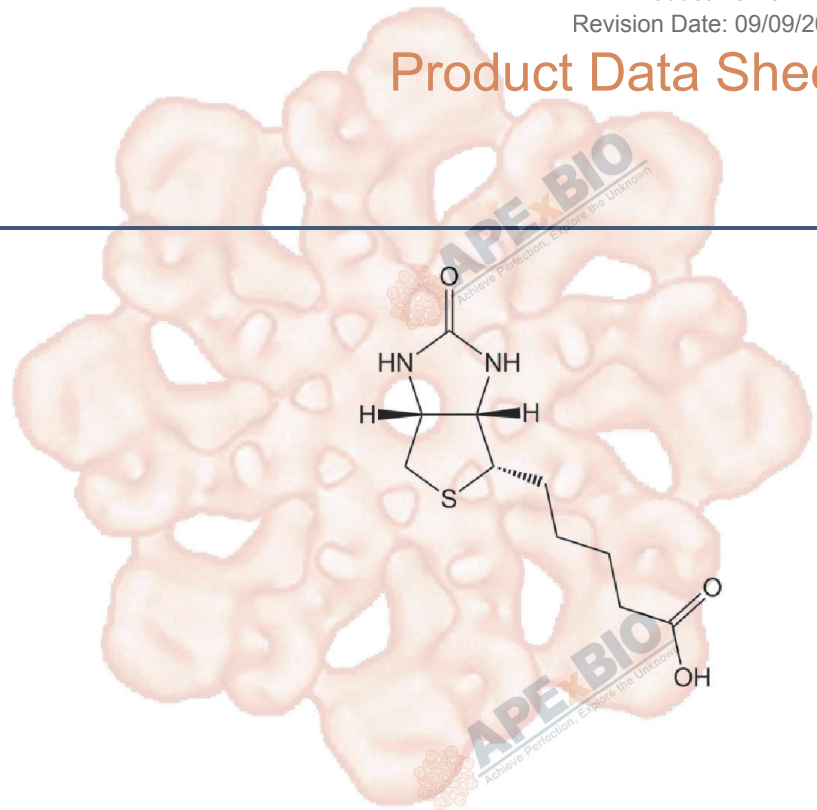


Product Data Sheet

Biotin

Cat. No.:	A8010
CAS No.:	58-85-5
Formula:	C ₁₀ H ₁₆ N ₂ O ₃ S
M.Wt:	244.31
Synonyms:	D-Biotin, Vitamin H
Target:	Labels and tags
Pathway:	Biotinylation Reagents
Storage:	Store at -20°C



Solvent & Solubility

≥24.4 mg/mL in DMSO; insoluble in H₂O; insoluble in EtOH

In Vitro	Preparing Stock Solutions	Mass			
		Solvent Concentration	1mg	5mg	10mg
		1 mM	4.0932 mL	20.4658 mL	40.9316 mL
		5 mM	0.8186 mL	4.0932 mL	8.1863 mL
		10 mM	0.4093 mL	2.0466 mL	4.0932 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

Lysine probe coupled to mass spectrometry detection

IC₅₀ & Target

In Vitro

Cell Viability Assay

Preparation method:

Soluble in DMSO > 10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Reacting conditions:

room temperature for 1 h

Applications:

Biotin-labeling of proteins: Biotinyl-N-hydroxysuccinimide (BNHS) was used for

introducing biotin moieties into proteins. In order to obtain the desired molar ratio of BNHS to free amino groups of the protein, a solution of 0.1 M NaHCO₃ containing 10 mg/ml of protein was mixed with various volumes of 0.1 M solution of BNHS. The reaction mixture was incubated at room temperature for 1 h and then dialyzed for 24 h at 4°C against several changes of PBS. After dialysis, an equal volume of glycerol was added and the preparation was kept at -20°C until used. A fresh solution of BNHS was prepared each time immediately before use. The 2, 4, 6-trinitrobenzene sulfonic acid procedure was used to determine the free amino groups in native and biotin-substituted proteins. Total biotin covalently bound to IgG was determined by an avidin-binding assay.

In Vivo

Animal experiment

Applications:

Product Citations

See more customer validations on www.apexbt.com.

References

[1]. JEAN-LUC GUESDON, THERESE TERNYNCK AND STRATIS AVRAMEAS. The Use of Avidin-Biotin Interaction in Immunoenzymatic Techniques. THE JOURNAL OF HISTOCHEMISTRY AND CYTOCHEMISTRY. 1979.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

APExBIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com

