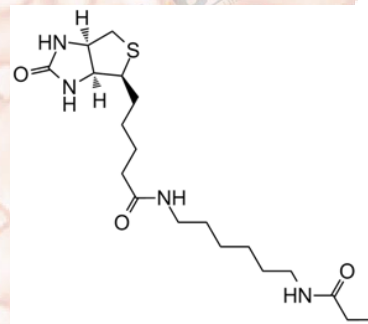


# Product Data Sheet

## Iodoacetyl-LC-Biotin

<b>Cat. No.:</b>	A8009
<b>CAS No.:</b>	93285-75-7
<b>Formula:</b>	C <sub>18</sub> H <sub>31</sub> N <sub>4</sub> O <sub>3</sub> S
<b>M.Wt:</b>	510.43
<b>Synonyms:</b>	N-Biotinyl-N'-(iodoacetyl)-1,6-hexanediamine, Iaa-biotin
<b>Target:</b>	Biotinylation Reagents
<b>Pathway:</b>	Sulfhydryl Biotinylation Reagents
<b>Storage:</b>	Store at -20°C



### Solvent & Solubility

≥51 mg/mL in DMSO with gentle warming; insoluble in EtOH; insoluble in H<sub>2</sub>O

In Vitro

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1mg	5mg	10mg
	1 mM		1.9591 mL	9.7957 mL	19.5913 mL
	5 mM		0.3918 mL	1.9591 mL	3.9183 mL
	10 mM		0.1959 mL	0.9796 mL	1.9591 mL

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

### Biological Activity

Shortsummary

Sulfhydryl-reactive biotinylation reagent, iodoacetyl-activated

IC<sub>50</sub> & Target

#### Cell Viability Assay

In Vitro

Preparation method:	Soluble in DMSO or DMF.
Reacting conditions:	4mM, room temperature for 90min
Applications:	Immunoglobulin G (26.7 nmol) was dissolved in 1ml of 0.1M sodium phosphate, 5Mm EDTA buffer, pH 6. To this solution, DTT was added to produce a 50mM final concentration and incubation for 90min at 37 °C, the

solution was allowed to cool to room temperature. Excess DTT was removed by molecular sieve chromatography using 50mM Tris, pH 8.3, with 5mM EDTA as the elution buffer. The IgG with reduced sulfhydryl groups was then biotinylated; 30 µl of 4mM iodoacetyl-LC-biotin in Me2SO was added and the mixture was incubated for 90min at room temperature in the dark. Finally, residual biotinylating reagent and free biotin were removed by dialysis against 0.1mM PBS, pH 7.2, for 72h. Protein concentrations were determined by BCA protein assay. 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](http://www.apexbt.com).

## References

[1]. Anna Bogusiewicz, Nell I. Mock, and Donald M. Mock. Instability of the biotin–protein bond in human plasma. *Analytical Biochemistry* 327 (2004) 156–161.

## 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.*

**APEX BIO Technology**

[www.apexbt.com](http://www.apexbt.com)

2 | [www.apexbt.com](http://www.apexbt.com)



