

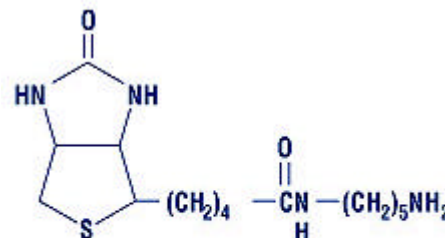
5-(BiotinAmido)PentylAmine

Product Description

Catalog number: UP84961A, 50mg UP84961B, 100mg
Name: 5-(BiotinAmido)PentylAmine
Formula: C₁₀H₁₇N₃O₂S, M.W.= 329.49
Storage: Store cold. Keep dry. (L)
 Warm to room temperature before opening

Applications:

- Biotinylation of Carboxylic Acids containing biomolecules ([alHakim1988](#)), notably DNA and peptides.
- transglutaminase-mediated modification of glutamine residues in cells and certain proteins ([Lai 1994](#), [Slaughter1992](#)).
- Colorimetric assay of blood coagulation factor XIII in plasma ([Lee 1988](#))



Scientific Information

- **(BiotinAmido)PentylAmine** is relatively water soluble (up 50nM in water) and contains a terminal primary amine, separated from biotin by a 18.9Angstroms long spacer.
- **Coupling to carboxyl** containing molecules require the use of EDAC (#[UP52005](#)). Protocols are given in the literature, or you may set up your own protocole using following guidelines: The protein may be prepared in PBS or MES 0.1M pH5-6, and incubated for 2H at room temperature at 80μM with 2.8nM of BiotinAmidoPentylAmine and 6.9mM of EDAC. Polymerization of the protein (and correlated proecipitate) may occur, and reduced by decreasing EDAC ratio to protein or increasing biotin ratio. After desalting, the biotinylated protein may be analysed for biotin content (HABA assay #[UP05361](#)).

Literature for UP84961

Lee, K.Y., Birckbichler, P.J. and Patterson, M.K., Jr. (1988). Colorimetric assay of blood coagulation factor XIII in plasma. *Clin. Chem.* **34**, 906-910.

Lai TS, Achyuthan KE, Santiago MA, Greenberg GS (1994); Carboxyl-terminal truncation of recombinant factor XIII A-chains. Characterization of minimum structural requirement for transglutaminase activity; *J Biol Chem* 269, 24596-24601 PN17717.

Slaughter TF, Achyuthan KE, Lai TS, Greenberg CS. (1992); A microtiter plate transglutaminase assay utilizing 5-(biotinamido)pentylamine as substrate; *Anal Biochem* 205, 166-171 PN14664.

al-Hakim AH, Hull R (1988); Chemically synthesized non-radioactive biotinylated long-chain nucleic acid hybridization probes; *Biochem J* 251, 935-938 PN7428.

Related documents and products

[PLP-Biotins](#) [Biotins](#)

[UP10685](#) Biotin
[UP39375](#) IminoBiotin
[UP52117](#) NHS activated Biotins
[UP35329](#) NHS-IminoBiotin

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