

Lumiprobe Corporation

115 Airport Dr Suite 160 Westminster, Maryland 21157

USA

Phone: +1 888 973 6353 Fax: +1 888 973 6354 Email: order@lumiprobe.com

Biocytin hydrochloride

http://www.lumiprobe.com/p/biocytin-hydrochloride

Biocytin (ϵ -biotinoyl-L-lysine) is a derivative of D-biotin and L-lysine. The compound has both a carboxyl group and an amino group, due to which it is widely used as a spacer and a component of trifunctional <u>crosslinkers</u> in the modification of proteins.

Biocytin, as a biotinidase cofactor, can be used to determine the specificity of biotinidases and to study the kinetics and mechanisms of cellular delivery.

Biocytin is also used as an anterograde neurotracer.

Biocytin hydrochloride has a high solubility in aqueous solutions; it can be used to biotinylate proteins under slightly acidic conditions (pH 4-6) using EDAC, which distinguishes it from N-hydroxysuccinimide (NHS) esters of biotin.

Structure of Biocytin hydrochloride

General properties

Appearance: white powder

Molecular 408.95

weight:

CAS number: 98930-70-2 Molecular $C_{16}H_{29}CIN_4O_4S$

formula:

IUPAC name: (S)-2-amino-6-(5-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)pentanamido)hexanoic acid

hydrochloride

Solubility: good in water, DMSO

Quality NMR ¹H and HPLC-MS (95+%)

control:

Storage 24 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks.

conditions: Desiccate.

Legal Product is offered and sold for research purposes only. Product is not tested for safety and efficacy in food, statement: drug, medical device, cosmetic, no express or implied authorization to use for any other purpose, including,

without limitation, in vitro diagnostic purposes, for humans or animals or for commercial purposes.