

Product Data Sheet

Product Name: 2-Iminothiolane hydrochloride

Cat. No.: GC66259

Chemical Properties

Cas. No. 4781-83-3

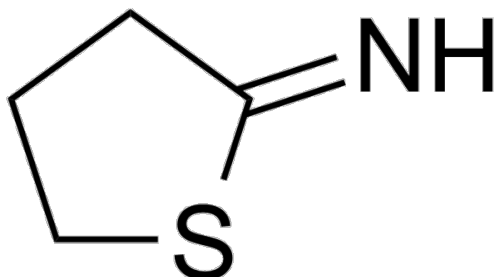
Formula C_4H_8CINS M.Wt 137.63

Solubility H_2O : 100 mg/mL (726.59 mM; Need ultrasonic) DMSO : 14.29 mg/mL (103.83 mM; ultrasonic and warming and heat to 60°C) Storage 4°C, away from moisture

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure



HCl

Background

2-Iminothiolane hydrochloride is a reagent for the introduction of sulphydryl groups into oligosaccharides, proteins/peptides^[1]. 2-Iminothiolane hydrochloride can be utilized to develop a method for coupling macrocyclic bifunctional chelating agents to antibodies^[2]. 2-Iminothiolane hydrochloride has been widely used to prepare reducible polycation gene vectors to improve

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

transfection efficiency and reduce the cytotoxicity of polymeric gene vectors^[3].

References:

- [1] Tarentino A L, Phelan A W, Plummer Jr T H. 2-Iminothiolane: a reagent for the introduction of sulphydryl groups into oligosaccharides derived from asparagine-linked glycans[J]. Glycobiology, 1993, 3(3): 279-285.
- [2] McCall M J, Diril H, Meares C F. Simplified method for conjugating macrocyclic bifunctional chelating agents to antibodies via 2-iminothiolane[J]. Bioconjugate Chemistry, 1990, 1(3): 222-226.
- [3] Kang H C, Kang H J, Bae Y H. A reducible polycationic gene vector derived from thiolated low molecular weight branched polyethyleneimine linked by 2-iminothiolane[J]. Biomaterials, 2011, 32(4): 1193-1203.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA