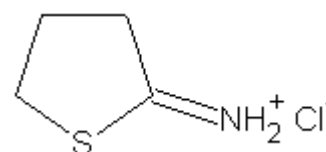


2-Iminothiolane (Traut's reagent)

Product Description

Modifying reagent for protein (blocking of amine, conversion to thiols), or crosslinking agent for oriented protein-protein, and RNA-protein conjugation.

cat.number : [UP42425A](#), 500mg [UP42425B](#), 1G [CA](#)
Name: 2-Iminothiolane (Traut's reagent)
Chemical Structure: C₄H₈NSCl
 CAS: [4781-83-3]



Storage: +4°C (L), packed under N₂ gas, protected from water

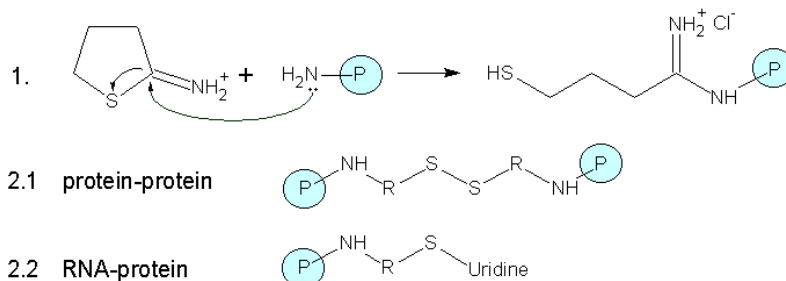
Scientific and technical Information

Applications

- Protein amine bloquage
- conversion of amines to sulfhydryls
- oriented coupling of proteins and RNA

Scientific information

- Length of cross-link (P):
 -protein-protein crosslink: 1.45 nm
 -RNA-protein: 0.5 nm
- Specificity :



Reaction with proteins is performed at pH7-10 in aqueous buffer.

RNA-protein conjugation was performed by reaction with 2-iminothiolane followed by a mild ultraviolet irradiation treatment ([Wover 1983](#) for ribosomal subunits)

Additional Information

Reagent for R&D *in vitro* use only

Literature

[PubMed](#): Traut RR, Bollen A, Sun TT, Hershey JW, Sundberg J, Pierce LR.; Methyl 4-mercaptobutyrimidate as a cleavable cross-linking reagent and its application to the Escherichia coli 30S ribosome. *Biochemistry* 1973 Aug 14;12(17):3266-73 ; PMID: 4581787

[PubMed](#): Wower I, Wower J, Meinke M, Brimacombe R.; The use of 2-iminothiolane as an RNA-protein cross-linking agent in Escherichia coli ribosomes, and the localisation on 23S RNA of sites cross-linked to proteins L4, L6, L21, L23, L27 and L29; *Nucleic Acids Res* 1981 Sep 11;9(17):4285-302; PMID: 6170935

[PubMed](#): Wower I, Brimacombe R.; The localization of multiple sites on 16S RNA which are cross-linked to proteins S7 and S8 in Escherichia coli 30S ribosomal subunits by treatment with 2-iminothiolane; *Nucleic Acids Res* 1983 Mar 11;11(5):1419-37; PMID: 6338481

Contact uptima – Interchim for any question

Rev. C04E

Contact your local distributor

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