# Product Data Sheet

Product Name: S-(2-aminoethyl) Isothiourea (dihydrobromide)
Cat. No.: GC11745

## Chemical Properties

| | | | |
|---|---|---|---|
| Cas. No. | 56-10-0 | | |
| Chemical Name | 2-aminoethyl carbamimidothioate, dihydrobromide | | |
| SMILES | N/C(SCCN)=N/[H].Br.Br | | |
| Formula | $C_3H_9N_3S \cdot 2HBr$ | M.Wt | 281.0 |
| Solubility | ≤10mg/ml in Water | Storage | Store at -20°C |
| General tips | For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ 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 | | | |

## Background

S-(2-aminoethyl) Isothiourea (dihydrobromide) is a potent and non-selective inhibitor of NOS with Ki values of 1.8, 2.1, and 0.59 μM for human nNOS, eNOS, and iNOS, respectively [1].

In the brain, nitric oxide (NO), which is synthesized from L-arginine (Arg) by NO synthase (NOS), acts as both an intra- and an intercellular second messenger. Nitric oxide synthase (iNOS, eNOS, and nNOS) catalyzed the production of NO in the two-step oxidation of L-arginine. The three isozymes produce NO in separate tissues for different purposes in both normal and diseased states [1].

S-(2-aminoethyl) Isothiourea is a potent and non-selective NOS inhibitor with Ki values of 1.8, 2.1, and 0.59 μM for human nNOS, eNOS, and iNOS, respectively [1].

Reference:
[1]. Garvey EP, Oplinger JA, Tanoury GJ, et al. Potent and selective inhibition of human


***Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com***
***Address: 10292 Central Ave. #205, Montclair, CA, USA***

nitric oxide synthases. Inhibition by non-amino acid isothioureas. J Biol Chem. 1994 Oct 28;269(43):26669-76.


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