

Product Data Sheet

Product Name: Thioarginine (hydrobromide)

Cat. No.: GC45036

Chemical Properties

Cas. No. 2108196-23-0

SMILES N/C(SCCC[C@H](N)C(O)=O)=N/[H].Br

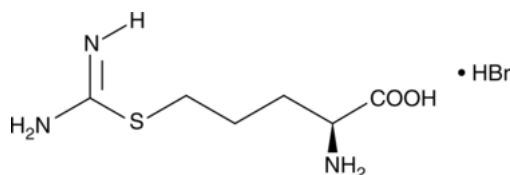
Formula C6H13N3O2S.HBr M.Wt 272.2

Solubility PBS (pH 7.2): 3 mg/ml Storage Store at -20°C

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



Background

L-Arginine serves as a common substrate for both nitric oxide synthase (NOS) and arginase in the cell. NOS catalyzes the oxidation of arginine to citrulline and NO with N ω -hydroxy-L-arginine (NOHA) formed as an intermediate. Arginase, on the other hand, catalyzes the hydrolysis of arginine into urea and L-ornithine. Thioarginine (hydrobromide) is a colorimetric substrate for arginase that provides the basis for continuous spectrophotometric measurement of enzyme activity. It exhibits K_m and k_{cat} values of 0.5 mM and 18,000 min⁻¹, respectively, which are similar to physiological substrate arginine. The thiol product of the reaction reacts with DTNB to produce 2-nitro-5-thiobenzoate for easy visualization at 405-420 nm.

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