
Product Data Sheet

Product Name: L-Threonine-15N

Cat. No.: GC63891

Chemical Properties

Cas. No. 80681-09-0

Formula C₄H₉¹⁵N₃

M.Wt 120.11

Solubility H₂O : 33.33 mg/mL (277.50 mM; Need ultrasonic); H₂O : 25 mg/mL (208.14 mM; Need ultrasonic)Store
Storage 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-Threonine-15N is the 15N-labeled L-Threonine. L-Threonine is a natural amino acid, can be produced by microbial fermentation, and is used in food, medicine, or feed[1][2].

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs[1].

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216. [2]. Zhao H, et al. Increasing L-threonine production in *Escherichia coli* by engineering the glyoxylate shunt and the L-threonine biosynthesis pathway. *Appl Microbiol Biotechnol.* 2018 Jul;102(13):5505-5518.

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