

Product Data Sheet

Product Name: L-Threonine-d2

Cat. No.: GC49369

Chemical Properties

Cas. No. 1202936-45-5

SMILES C[C@](O)([2H])[C@@](N)([2H])C(O)=O

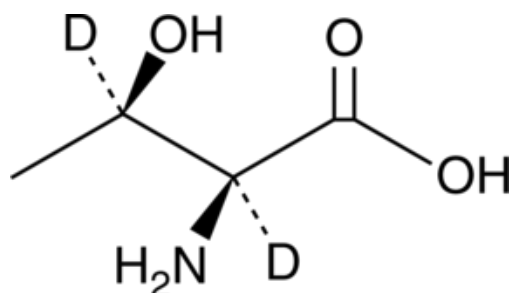
Formula C4H7D2NO3 M.Wt 121.1

Solubility PBS (pH 7.2): 2 mg/ml Storage -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-d₂ is intended for use as an internal standard for the quantification of L-threonine by GC- or LC-MS. L-Threonine is an essential amino acid.¹ It undergoes catabolism via threonine dehydrogenase to yield the glucogenic metabolites succinyl coenzyme A (succinyl CoA) and pyruvate. Administration of L-threonine-deficient diets induces lameness of the thoracic and pelvic limbs and decreases food intake and weight gain in kittens.²

1. Massey, K.A., Blakeslee, C.H., and Pitkow, H.S. A review of physiological and metabolic effects of essential amino acids. *Amino Acids* 14(4):271-300 (1998).
2. Titchenal, C.A., Rogers, Q.R., Indrieri, R.J., et al. Threonine imbalance, deficiency and neurologic dysfunction in the kitten. *J. Nutr.* 110(12):2444-2459 (1980).

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