
Product Data Sheet

Product Name: D-Tyrosine-d4

Cat. No.: GC69028

Chemical Properties

Cas. No. 944386-47-4

Formula $C_9H_7D_4NO_3$ M.Wt 185.21

Solubility 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

D-Tyrosine-d₄ is the deuterium labeled D-Tyrosine. D-Tyrosine is the D-isomer of tyrosine. D-Tyrosine negatively regulates melanin synthesis by inhibiting bacterial growth[1][2].

Stable heavy isotopes of drogen, 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]. Jisu Park, et al. D-tyrosine Negatively Regulates Melanin Synthesis by Competitively Inhibiting Tyrosinase Activity. *Pigment Cell Melanoma Res.* 2018 May;31(3):374-383.

[3]. Cong Yu, et al. Inhibition of Biofilm Formation by D-tyrosine: Effect of Bacterial Type and D-tyrosine Concentration. *Water Res.* 2016 Apr 1;92:173-9.

Caution: Product has not been fully validated for medical applications. For research use only.

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