
Product Data Sheet

Product Name: D-Galactose-13C

Cat. No.: GC68970

Chemical Properties

Cas. No. 70849-30-8

Formula $C_5^{13}CH_{12}O_6$ M.Wt 181.15

Solubility H₂O : 125 mg/mL (690.04 mM; Need ultrasonic) 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-Galactose-¹³C is the ¹³C labeled D-Galactose. D-Galactose is a natural aldohexose and C-4 epimer of glucose[1][2][3][4].

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 Feb;53(2):211-216.

[2]. Csiszovszki Z, et al. Structure and function of the D-galactose network in enterobacteria. MBio. 2011 Jun 28;2(4):e00053-11.; Cui X, et al. Chronic systemic D-galactose exposure induces memory loss, neurodegeneration, and oxidativedamage in mice: protectiv

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

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