
Product Data Sheet

Product Name: DL-Homocystine-3,3,3',3',4,4,4',4'-d8

Cat. No.: GC68042

Chemical Properties

Cas. No. 108641-82-3

Formula $C_8H_8D_8N_2O_4S_2$ M.Wt 276.4

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**

DL-Homocystine-3,3,3',3',4,4,4',4'-d8 is the deuterium labeled DL-Homocystine. DL-Homocystine is the double-bonded form of homocysteine and homocysteine is recognized as an important substance in the pathogenesis and pathophysiology of schizophrenia^{[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]. Brown AS, et al. Homocysteine and schizophrenia: from prenatal to adult life. *Prog Neuropsychopharmacol Biol Psychiatry*. 2005 Sep;29(7):1175-80.

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

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