

Product Data Sheet

Product Name: 2-Acetyl-5-tetrahydroxybutyl Imidazole

Cat. No.: GC42112

Chemical Properties

Cas. No. 94944-70-4

SMILES CC(=O)c1ncc([C@@H](O)[C@H](O)C(O)CO)[nH]1

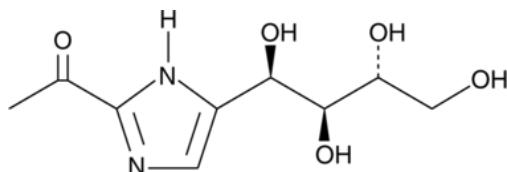
Formula C₉H₁₄N₂O₅ M.Wt 230.2

Solubility DMSO: 2 mg/ml, PBS (pH 7.2): 0.15 mg/ml Storage Store at -20°C

General For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the tips ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Evaluation sample solution: ship with blue ice All other available size: ship with RT, or Condition blue ice upon request.

Structure



Background

Sphingosine-1-phosphate (S1P) lyase catalyzes the irreversible decomposition of S1P to hexadecanaldehyde and phosphoethanolamine. 2-Acetyl-5-tetrahydroxybutyl imidazole (THI) is an inhibitor of S1P lyase. Because S1P lyase is primarily expressed in lymphatic tissue, treatment of mice with THI (50 µg/ml in drinking water) increases lymphoid tissue S1P concentrations 100-fold, reducing lymphocyte egress from thymus and peripheral lymphoid organs. The resulting lymphopenia is reversible following cessation of THI treatment. Reducing S1P lyase activity results in therapeutic levels of immunosuppression without the non-lymphoid lesions that result from synthetic S1P receptor agonists.

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