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## Product Data Sheet

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Product Name: Betahistine-d3 dihydrochloride

Cat. No.: GC63923

**Chemical Properties**

Cas. No. 244094-72-2

Formula C<sub>8</sub>H<sub>11</sub>D<sub>3</sub>Cl<sub>2</sub>N<sub>2</sub>

M.Wt 212.13

H<sub>2</sub>O : ≥ 50 mg/mL (235.70 mM); DMSO : 33.33 mg/mL

Store

Solubility (157.12 mM; Need ultrasonic); DMF : 5 mg/mL (23.57 mM);  
Need ultrasonic)Storage 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 Betahistine-d3 dihydrochloride**Background**

Betahistine-d<sub>3</sub> is intended for use as an internal standard for the quantification of betahistine by GC- or LC-MS. Betahistine is a histamine H<sub>3</sub> receptor antagonist and histamine H<sub>1</sub> receptor agonist.<sup>1</sup> *In vivo*, betahistine dilates pre-capillary arterioles and increases blood flow to the stria vascularis in guinea pigs.<sup>2,3</sup> Betahistine (8 mg/kg) reduces weight gain and increased feeding behavior induced by olanzapine in female rats.<sup>4</sup> Formulations containing betahistine have been used in the treatment of balance disorders and vertigo symptoms associated with Meniere's disease.

1.Timmerman, H.Histamine agonists and antagonists *Acta Otolaryngol. Suppl.*4795-11(1991) 2.Bertlich, M., Ihler, F., Sharaf, K., et al.Betahistine metabolites, aminoethylpyridine, and hydroxyethylpyridine increase cochlear blood flow in guinea pigs in vivo *Int. J. Audiol.*53(10)753-759(2014) 3.Bertlich, M., Ihler, F., Weiss, B.G., et al.Role of capillary pericytes and precapillary arterioles in the vascular mechanism of betahistine in a guinea pig inner ear model *Life Sci.*18717-21(2017) 4.Lian, J., Huang, X.-F., Pai, N., et al.Ameliorating antipsychotic-induced weight gain by betahistine:

**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

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Mechanisms and clinical implications Pharmacol. Res. 10651-63(2016)

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