
Product Data Sheet

Product Name: Carvedilol metabolite 4-Hydroxyphenyl Carvedilol

Cat. No.: GC33579

Chemical Properties

Cas. No. 142227-49-4

SMILES OC1=CC=C(OCCNCC(O)COC2=CC=CC(N3)=C2C4=C3C=CC=C4)C(OC)=C1Formula C₂₄H₂₆N₂O₅ M.Wt 422.47

Solubility Acetonitrile: slightly soluble, Methanol: slightly soluble 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**

4'-hydroxyphenyl Carvedilol is a metabolite of carvedilol that is a more potent β -adrenergic receptor antagonist than carvedilol but has weaker vasodilatory activity.¹ It is formed through oxidation primarily by the cytochrome P450 (CYP) isoform CYP2D6.² 4'-hydroxyphenyl Carvedilol inhibits the formation of DPPH radicals in a cell-free assay.³

1. Patel, D.P., Sharma, P., Sanyal, M., et al. UPLC-MS/MS assay for the simultaneous quantification of carvedilol and its active metabolite 4'-hydroxyphenyl carvedilol in human plasma to support a bioequivalence study in healthy volunteers *Biomed. Chromatogr.* 27(8)974-986(2013)
2. Oldham, H.G., and Clarke, S.E. In vitro identification of the human cytochrome P450 enzymes involved in the metabolism of R(+)- and S(-)-carvedilol *Drug Metab. Dispos.* 25(8)970-977(1997)
3. Malig, T.C., Ashkin, M.R., Burman, A.L., et al. Comparison of free-radical inhibiting antioxidant properties of carvedilol and its phenolic metabolites *Medchemcomm.* 8(3)606-615(2017)

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