# PRODUCT INFORMATION



## 4'-hydroxyphenyl Carvedilol

Item No. 27172

CAS Registry No.: 142227-49-4

Formal Name: 4-[2-[[3-(9H-carbazol-4-yloxy)-2-

hydroxypropyllaminolethoxyl-3-

methoxy-phenol

Synonym: BM 140686 MF:  $C_{24}H_{26}N_2O_5$ FW:

422.5 **Purity:** ≥95% Supplied as: A solid Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### **Laboratory Procedures**

4'-hydroxyphenyl Carvedilol is supplied as a solid. A stock solution may be made by dissolving the 4'-hydroxyphenyl carvedilol in the solvent of choice, which should be purged with an inert gas. 4'-hydroxyphenyl Carvedilol is slightly soluble in acetonitrile and methanol.

#### Description

4'-hydroxyphenyl Carvedilol is a metabolite of carvedilol (Item No. 15418) that is a more potent β-adrenergic receptor antagonist than carvedilol but has weaker vasodilatory activity. 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

#### References

- 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).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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