PRODUCT INFORMATION



α-hydroxy Metoprolol

Item No. 28020

CAS Registry No.: 56392-16-6

Formal Name: $4-[2-hydroxy-3-[(1-methylethyl)amino]propoxy]-\alpha-$

(methoxymethyl)-benzenemethanol

MF: C₁₅H₂₅NO₄ FW: 283.4 **Purity:** ≥95% Supplied as: A solid Storage: -20°C Stability: ≥4 years

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

Laboratory Procedures

α-hydroxy Metoprolol is supplied as a solid. A stock solution may be made by dissolving the α-hydroxy metoprolol in the solvent of choice, which should be purged with an inert gas. α -hydroxy Metoprolol is soluble in the organic solvent DMSO.

Description

α-hydroxy Metoprolol is a metabolite of the β1-adrenergic receptor (β1-AR) antagonist metoprolol (Item No. 15429). It is formed from metoprolol by the cytochrome P450 (CYP) isoform CYP2D6.^{2,3}

References

- 1. Cerqueira, P.M., Cesarino, E.J., Bertucci, C., et al. Stereoselective metabolism of metoprolol: Enantioselectivity of α-hydroxymetoprolol in plasma and urine. Chirality 15(6), 542-549 (2003).
- 2. Seeringer, A., Brockmöller, J., Bauer, S., et al. Enantiospecific pharmacokinetics of metoprolol in CYP2D6 ultra-rapid metabolizers and correlation with exercise-induced heart rate. Eur. J. Clin. Pharmacol. 64(9), 883-888 (2008).
- 3. Bae, S.H., Lee, J.K., Cho, D.-Y., et al. Simultaneous determination of metoprolol and its metabolites, α -hydroxymetoprolol and O-desmethylmetoprolol, in human plasma by liquid chromatography with tandem mass spectrometry: Application to the pharmacokinetics of metoprolol associated with CYP2D6 genotypes. J. Sep. Sci. 37(11), 1256-1264 (2014).

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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