

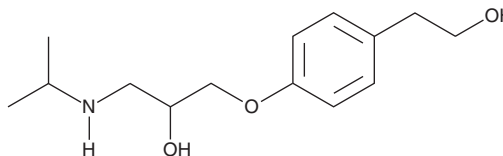
# PRODUCT INFORMATION



## O-Desmethyl Metoprolol

Item No. 21787

**CAS Registry No.:** 62572-94-5  
**Formal Name:** 4-[2-hydroxy-3-[(1-methylethyl)amino]propoxy]-benzeneethanol  
**Synonyms:** O-DMM, SL 80-0088  
**MF:** C<sub>14</sub>H<sub>23</sub>NO<sub>3</sub>  
**FW:** 253.3  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 224, 277 nm  
**Supplied as:** A crystalline 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

O-Desmethyl metoprolol is supplied as a crystalline solid. A stock solution may be made by dissolving the O-desmethyl metoprolol in the solvent of choice, which should be purged with an inert gas. O-Desmethyl metoprolol is soluble in dichloromethane and chloroform. It is slightly soluble in methanol.

### Description

O-Desmethyl metoprolol is a metabolite of the β<sub>1</sub>-adrenergic receptor (β<sub>1</sub>-AR) antagonist metoprolol (Item No. 15429).<sup>1</sup> It is formed from metoprolol by the cytochrome P450 (CYP) isoform CYP2D6.<sup>2,3</sup>

### 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-desmethylnmetoprolol, 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.

#### SAFETY DATA

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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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
[WWW.CAYMANCHEM.COM](http://WWW.CAYMANCHEM.COM)