

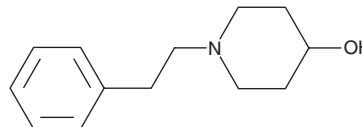
# PRODUCT INFORMATION



## 4-Hydroxy-1-(2-phenylethyl)piperidine

Item No. 40440

CAS Registry No.: 3518-76-1  
Formal Name: 1-(2-phenylethyl)-4-piperidinol  
MF: C<sub>13</sub>H<sub>19</sub>NO  
FW: 205.3  
Purity: ≥98%  
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-Hydroxy-1-(2-phenylethyl)piperidine is supplied as a solid. A stock solution may be made by dissolving the 4-hydroxy-1-(2-phenylethyl)piperidine in the solvent of choice, which should be purged with an inert gas. 4-Hydroxy-1-(2-phenylethyl)piperidine is soluble in chloroform. 4-Hydroxy-1-(2-phenylethyl)piperidine is slightly soluble in acetonitrile.

4-Hydroxy-1-(2-phenylethyl)piperidine is slightly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

### Description

4-Hydroxy-1-(2-phenylethyl)piperidine is a building block that has been used in the synthesis of ligands of the muscarinic acetylcholine receptor (mAChR) or sigma non-opioid intracellular receptor 1 ( $\sigma_1$  receptor).<sup>1,2</sup> It is also a metabolite of the opioids furanyl fentanyl and 4-fluoroisobutyryl fentanyl (FIBF).<sup>3</sup>

### References

1. Tejani-Butt, S.M., Luthin, G.R., Wolfe, B.B., *et al.* N-substituted derivatives of 4-piperidinyl benzilate: Affinities for brain muscarinic acetylcholine receptors. *Life Sci.* **47(10)**, 841-848 (1990).
2. Prezzavento, O., Arena, E., Parenti, C., *et al.* Design and synthesis of new bifunctional sigma-1 selective ligands with antioxidant activity. *J. Med. Chem.* **56(6)**, 2447-2455 (2013).
3. Watanabe, S., Vikingsson, S., Roman, M., *et al.* *In vitro* and *in vivo* metabolite identification studies for the new synthetic opioids acetylfentanyl, acrylfentanyl, furanylfentanyl, and 4-fluoro-isobutyrylfentanyl. *AAPS J.* **19(4)**, 1102-1122 (2017).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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