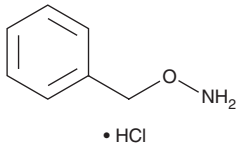
PRODUCT INFORMATION

O-Benzylhydroxylamine (hydrochloride)

Item No. 30528

CAS Registry No.: 2687-43-6
Formal Name: O-(phenylmethyl)-hydroxylamine, monohydrochloride
Synonyms: Benzyloxyamine, O-(Phenylmethyl)hydroxylamine, Phenylmethoxyamine
MF: $C_7H_9NO \bullet HCl$
FW: 159.6
Purity: ≥98%
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-Benzylhydroxylamine (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the O-benzylhydroxylamine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. O-Benzylhydroxylamine (hydrochloride) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of O-benzylhydroxylamine (hydrochloride) in these solvents is approximately 10 and 5 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of O-benzylhydroxylamine (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of O-benzylhydroxylamine (hydrochloride) in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

O-Benzylhydroxylamine is a building block.[1,2] It has been used in the synthesis of β-lactam inhibitor precursors and fluoroquinolone derivatives with antibiotic activity.

References

1. Bellettini, J.R. and Miller, M.J. A short synthesis of an important precursor to a new class of bicyclic β-lactamase inhibitors *Tetrahedron Lett.* **38(2)**, 167-168 (1997).
2. del Rio, M.-L., Buhler, L., Gibbons, C., *et al.* PD-1/PD-L1, PD-1/PD-L2, and other co-inhibitory signaling pathways in transplantation. *Transpl. Int.* **21(11)**, 1015-1028 (2008).

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