PRODUCT INFORMATION



Deterenol (hydrochloride)

Item No. 39583

CAS Registry No.:	23239-36-3
Formal Name:	4-hydroxy-α-[[(1-methylethyl)amino]methyl]-
	benzenemethanol, monohydrochloride H OH
Synonyms:	Isopropyloctopamine, Isopropylnorsynephrine
MF:	$C_{11}H_{17}NO_2 \bullet HCI$
FW:	231.7
Purity:	≥95%
Supplied as:	A solid • HCI VOH
Storage:	-20°C
Stability:	≥4 years
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.	

Laboratory Procedures

Deterenol (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the deterenol (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Deterenol (hydrochloride) is soluble in the organic solvent DMSO. Deterenol (hydrochloride) is slightly soluble in acetonitrile.

Deterenol (hydrochloride) 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

Deterenol is a non-selective β -adrenergic receptor (β -AR) agonist.¹ It increases tension in isolated right and left guinea pig atria and trachea (IC₅₀s = 0.411, 1.44, and 8.37 μ M, respectively), which endogenously express β -ARs, but has no effect on isolated rabbit aortic strips, which express α -ARs. Deterenol induces lipolysis in human adipocytes.² Formulations containing deterenol have previously been used as weight loss and sports supplements.

References

1. Anderson, W.G. The sympathomimetic activity of N-isopropyloctopamine in vitro. J. Pharmacol. Exp. Ther. 225(3), 553-558 (1983).

2. Mercader, J., Wanecq, E., Chen, J., et al. Isopropylnorsynephrine is a stronger lipolytic agent in human adipocytes than synephrine and other amines present in Citrus aurantium. J. Physiol. Biochem. 67(3), 443-452 (2011).

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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