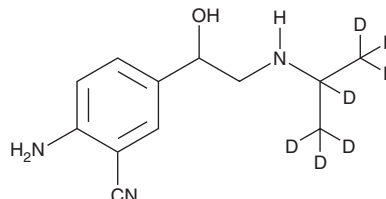


PRODUCT INFORMATION



Cimaterol-d₇ Item No. 28903

CAS Registry No.: 1228182-44-2
Formal Name: 2-amino-5-[1-hydroxy-2-[[1-(methyl-d₃)ethyl-1,2,2,2-d₄]amino]ethyl]-benzonitrile
Synonym: Cimaterolum-d₇
MF: C₁₂H₁₀D₇N₃O
FW: 226.3
Chemical Purity: ≥98% (Cimaterol)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₇); ≤1% d₀
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

Cimaterol-d₇ is intended for use as an internal standard for the quantification of cimaterol (Item No. 15613) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Cimaterol-d₇ is supplied as a solid. A stock solution may be made by dissolving the cimaterol-d₇ in the solvent of choice, which should be purged with an inert gas. Cimaterol-d₇ is soluble in organic solvents such as methanol, DMSO, and dimethyl formamide.

Description

Cimaterol is a potent agonist of β -adrenergic receptors (pEC_{50} s = 8.13, 8.78, and 6.62 for human β_1 , β_2 , and β_3 , respectively).¹ Formulations containing cimaterol have been used in farmed animals (swine, fowl, etc.) to increase carcass mass and to alter muscle and fat deposition.^{2,3}

References

1. Mistry, S.N., Baker, J.G., Fischer, P.M., *et al.* Synthesis and in vitro and in vivo characterization of highly β_1 -selective β -adrenoceptor partial agonists. *J. Med. Chem.* **56**(10), 3852-3865 (2013).
2. Jones, R.W., Easter, R.A., McKeith, F.K., *et al.* Effect of the β -adrenergic agonist cimaterol (CL 263,780) on the growth and carcass characteristics of finishing swine. *J. Anim. Sci.* **61**(4), 905-913 (1985).
3. Byrem, T.M., Beermann, D.H., and Robinson, T.F. The β -agonist cimaterol directly enhances chronic protein accretion in skeletal muscle. *J. Anim. Sci.* **76**(4), 988-998 (1998).

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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