MBDB-d₃ (hydrochloride)

Item No. 16555

Formal Name: α-ethyl-N-methyl-d₃-1,3-benzodioxolylbutanamine, monohydrochloride

Synonym: N-Methyl-1,3-benzodioxolylbutanamine-d₃

MF: C₁₂H₁₄D₃NO₂ • HCl

FW: 246.8

Chemical Purity: ≥98% MBDB

Deuterium Incorporation: ≥99% deuterated forms (d₁-d₃); ≤1% d₀

Stability: ≥2 years at -20°C

Supplied as: A crystalline solid

UV/Vis.: λ_max: 235, 290 nm

MBDB-d₃ (hydrochloride) contains three deuterium atoms. It is intended for use as an internal standard for the quantification of MBDB (Item No. 14218) by GC- or LC-mass spectrometry (MS). For long term storage, we suggest that MBDB-d₃ (hydrochloride) be stored as supplied at -20°C. It should be stable for at least two years.

MBDB-d₃ (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the MBDB-d₃ (hydrochloride) in the solvent of choice. MBDB-d₃ (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of MBDB-d₃ (hydrochloride) in ethanol is approximately 10 mg/ml and approximately 30 mg/ml in DMSO and DMF.

MBDB-d₃ (hydrochloride) is used as an internal standard for the quantification of MBDB by stable isotope dilution 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).

MBDB-d₃ (hydrochloride) contains three deuterium atoms. It is intended for use as an internal standard for the quantification of MBDB by stable isotope dilution 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).

MBDB is an analog of methylenedioxymethamphetamine (MDMA, Item No. 13971), differing only by the substitution of an ethyl for methyl group at the α-carbon. Like MDMA, MBDB is an entactogen that potently inhibits monoamine neurotransmission in rat brain.

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/16555

SAFETY DATA
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY; NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer’s exclusive remedy and Cayman’s sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman’s option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.