SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

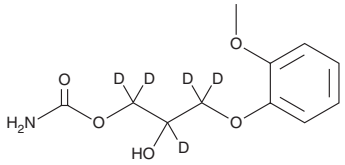
linkedin.com/company/szaboscandic

PRODUCT INFORMATION

Methocarbamol-d_5

Item No. 33464

CAS Registry No.:	1189699-70-4
Formal Name:	3-(2-methoxyphenoxy)-1,2-propane-1,1,2,3,3-d_5-diol, 1-carbamate
Synonyms:	AHR 85-d_5, Guaiacol Glyceryl Ether Carbamate-d_5, Guaiphenesin Carbamate-d_5
MF:	$C_{11}H_{10}D_5NO_5$
FW:	246.3
Chemical Purity:	≥95% (Methocarbamol)
Deuterium Incorporation:	≥99% deuterated forms (d_1-d_5); ≤1% d_0
Supplied as:	A solid
Storage:	-20°C
Stability:	≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Methocarbamol-d_5 is intended for use as an internal standard for the quantification of methocarbamol (Item No. 23870) 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).

Methocarbamol-d_5 is supplied as a solid. A stock solution may be made by dissolving the methocarbamol-d_5 in the solvent of choice, which should be purged with an inert gas. Methocarbamol-d_5 is soluble in methanol, DMSO, and dimethyl formamide.

Description

Methocarbamol is an orally bioavailable skeletal muscle relaxant.[1] *In vivo*, methocarbamol inhibits the ability of mice to remain on a vertical ladder for 1 minute (ED_{50} = 15 mg/kg) and decreases forelimb grip strength by 35.9% when administered at a dose of 500 mg/kg.[1,2] It abolishes femoral nerve-stimulated polysynaptic reflex contractions of the cat tibialis anterior muscle and prolongs the mean refractory period of directly or indirectly stimulated skeletal muscle when administered at a dose of 200 mg/kg.[3] Methocarbamol also selectively inhibits human carbonic anhydrase (CA) isoform I over CAII (IC_{50}s = 70 and ~80,000 µM, respectively).[4] Formulations containing methocarbamol have been used to treat skeletal muscle spasms.

References

1. Cymbalist, M.A. and Shapero, M. A comparative study of the effect of some centrally acting skeletal muscle relaxants in mice. *J. Pharm. Pharmacol.* **26(2)**, 109-112 (1974).
2. Nevins, M.E., Nash, S.A., and Beardsley, P.M. Quantitative grip strength assessment as a means of evaluating muscle relaxation in mice. *Psychopharmacology (Berl)* **110(1-2)**, 92-86 (1993).
3. Crankshaw, D.P. and Raper, C. Some studies on peripheral actions of mephenesin, methocarbamol and diazepam. *Br. J. Pharmacol.* **34(3)**, 579-590 (1968).
4. Parr, J.S. and Khalifah, R.G. Inhibition of carbonic anhydrases I and II by *N*-unsubstituted carbamate esters. *J. Biol. Chem.* **267(35)**, 25044-25050 (1992).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM