PRODUCT INFORMATION



Pentoxifylline-d₄

Item No. 33244

1185878-98-1	
3,7-dihydro-3,7-di(methyl-d ₃)-1-(5-	
oxohexyl)-1H-purine-2,6-dione	
Oxpentifylline-d ₆	
$C_{13}H_{12}D_6N_4O_3$	N N
284.3	
≥98% (Pentoxifylline)	N
	Nº C
\geq 99% deuterated forms (d ₁ -d ₆); \leq 1% d ₀	\downarrow
A solid	
-20°C	b
≥4 years	
	1185878-98-1 3,7-dihydro-3,7-di(methyl-d ₃)-1-(5- oxohexyl)-1H-purine-2,6-dione Oxpentifylline-d ₆ C ₁₃ H ₁₂ D ₆ N ₄ O ₃ 284.3 ≥98% (Pentoxifylline) ≥99% deuterated forms (d ₁ -d ₆); ≤1% d ₀ A solid -20°C ≥4 years

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

Laboratory Procedures

Pentoxifylline-d₆ is intended for use as an internal standard for the quantification of pentoxifylline (Item No. 18720) 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).

Pentoxifylline-d₆ is supplied as a solid. A stock solution may be made by dissolving the pentoxifylline-d₆ in the solvent of choice, which should be purged with an inert gas. Pentoxifylline- d_{c} is soluble in methanol, DMSO, and acetonitrile.

Description

Pentoxifylline is a hemorrheologic agent.¹ It increases the deformability of washed isolated human erythrocytes when used at a concentration of 100 μ M.² Pentoxifylline (1, 2, and 3 mM) inhibits ADP-induced platelet aggregation in isolated human whole blood.³ It inhibits thrombus formation induced by ADP in a hamster cheek pouch model when administered at doses of 5, 10, and 20 mg/kg.⁴ Formulations containing pentoxifylline have been used in the treatment of intermittent claudication.

References

- 1. Ward, A. and Clissold, S.P. Pentoxifylline. A review of its pharmacodynamic and pharmacokinetic properties, and its therapeutic efficacy. Drugs 34(1), 50-97 (1987).
- 2. Słoczyńska, K., Kózka, M., Pękala, E., et al. In vitro effect of pentoxifylline and lisofylline on deformability and aggregation of red blood cells from healthy subjects and patients with chronic venous disease. Acta Biochim. Pol. 60(1), 129-135 (2013).
- 3. Magnusson, B., Gunnarsson, M., Berntorp, E., et al. Effects of pentoxifylline and its metabolites on platelet aggregation in whole blood from healthy humans. Eur. J. Pharmacol. 581(3), 290-295 (2008).
- 4. Michal, M., Giessinger, N., and Schröer, R. Reduced thrombus formation in vivo after administration of pentoxifylline (Trental). Thromb. Res. 56(3), 359-368 (1989).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFFTY 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

uyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 02/16/2024

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