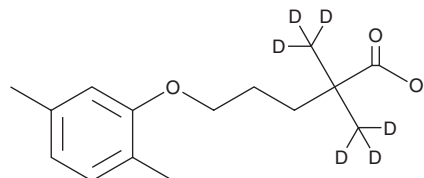


PRODUCT INFORMATION



Gemfibrozil-d₆ Item No. 31915

CAS Registry No.: 1184986-45-5
Formal Name: 5-(2,5-dimethylphenoxy)-2,2-di(methyl-d₃)-
pentanoic acid
Synonym: CI-719-d₆
MF: C₁₅H₁₆D₆O₃
FW: 256.4
Chemical Purity: ≥98% (Gemfibrozil)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₆); ≤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

Gemfibrozil-d₆ is intended for use as an internal standard for the quantification of gemfibrozil (Item No. 14835) 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).

Gemfibrozil-d₆ is supplied as a solid. A stock solution may be made by dissolving the gemfibrozil-d₆ in the solvent of choice, which should be purged with an inert gas. Gemfibrozil-d₆ is soluble in methanol and DMSO.

Description

Gemfibrozil is a peroxisome proliferator-activated receptor α (PPAR α) and PPAR γ agonist (EC₅₀s = 193.3 and 147.8 μ M, respectively, in transactivation assays).¹ *In vivo*, gemfibrozil (50 mg/kg, p.o.) reduces serum total cholesterol, triglyceride, and LDL levels in a rat model of high-cholesterol diet-induced hyperlipidemia.² Gemfibrozil (100 mg/kg per day) reduces atherosclerotic plaque area, superoxide production, and expression of the genes encoding the NF- κ B subunit p65 and chemokine (C-C) motif ligand 2 (CCL2) in ApoE^{-/-} mice.³ Formulations containing gemfibrozil have been used in the treatment of high cholesterol.

References

1. Kim, N.J., Lee, K.O., Koo, B.W., *et al.* Design, synthesis, and structure-activity relationship of carbamate-tethered aryl propanoic acids as novel PPAR α / γ dual agonists. *Bioorg. Med. Chem. Lett.* **17**(13), 3595-3598 (2007).
2. Solanki, Y.B. and Jain, S.M. Antihyperlipidemic activity of *Clitoria ternatea* and *Vigna mungo* in rats. *Pharm. Biol.* **48**(8), 915-923 (2010).
3. Calkin, A.C., Cooper, M.E., Jandeleit-Dahm, K.A., *et al.* Gemfibrozil decreases atherosclerosis in experimental diabetes in association with a reduction in oxidative stress and inflammation. *Diabetologia* **49**(4), 766-774 (2006).

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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