PRODUCT INFORMATION



Gemfibrozil 1-O-β-Glucuronide

Item No. 19080

CAS Registry No.: Formal Name:	91683-38-4 1-[5-(2,5-dimethylphenoxy)- 2,2-dimethylpentanoate], β-D- glucopyranuropic acid		ОН
MF:	$C_{21}H_{20}O_{0}$		γ γ
FW:	426.5	0	
Purity:	≥85%		ЮН УСН
UV/Vis.:	λ _{max} : 219 nm		
Supplied as:	A solid		ом
Storage:	-20°C		
Stability:	≥4 years		
Special Conditions: Contains up to $15\% \alpha$ -isomer			

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

Laboratory Procedures

Gemfibrozil 1-O- β -glucuronide is supplied as a solid. A stock solution may be made by dissolving the gemfibrozil 1-O- β -glucuronide in the solvent of choice, which should be purged with an inert gas. Gemfibrozil 1-O-β-glucuronide is slightly soluble in methanol.

Description

Gemfibrozil 1-O-β-glucuronide is a major metabolite of gemfibrozil (Item No. 14835) that is formed when gemfibrozil undergoes glucuronidation by UDP-glucuronosyltransferase (UGT) 2B7.¹ Gemfibrozil 1-O-β-glucuronide is an inhibitor of the cytochrome P450 (CYP) isoform CYP2C8 (IC₅₀ = 4.1 μ M). It is taken up by organic anion transporting polypeptide 1B1 (OATP1B1) in sandwich cultured human hepatocytes (SCHHs) and inhibits cellular uptake of valsartan (Item No. 14178) in MDCK cells expressing OATP1B1 (IC₅₀ = 20.4 μM).^{2,3}

References

- 1. Baer, B.R., DeLisle, R.K., and Allen, A. Benzylic oxidation of gemfibrozil-1-O- β -glucuronide by P450 2C8 leads to heme alkylation and irreversible inhibition. Chem. Res. Toxicol. 22(7), 1298-1309 (2009).
- 2. Kimoto, E., Li, R., Scialis, R.J., et al. Hepatic disposition of gemfibrozil and its major metabolite gemfibrozil 1-O-β-glucuronide. Mol. Pharm. 12(11), 3943-3952 (2015).
- 3. Yang, S.J., Kim, B.J., Mo, L., et al. Alteration of the intravenous and oral pharmacokinetics of valsartan via the concurrent use of gemfibrozil in rats. Biopharm. Drug. Dispos. 37(5), 245-254 (2016).

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

SAFETY DATA

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.

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