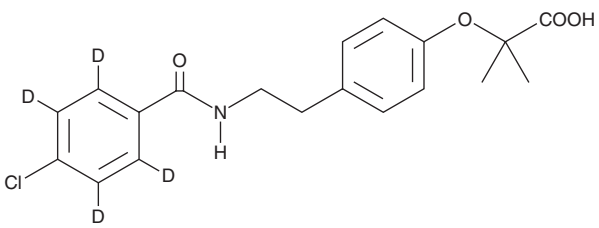
PRODUCT INFORMATION

Bezafibrate-d_4

Item No. 28526

CAS Registry No.: 1189452-53-6
Formal Name: 2-[4-[2-[(4-chlorobenzoyl-2,3,5,6-d_4)amino] ethyl]phenoxy]-2-methyl-propanoic acid
Synonym: Benzofibrate-d_4
MF: $C_{19}H_{16}ClD_4NO_4$
FW: 365.8
Chemical Purity: ≥98% (Bezafibrate)
Deuterium Incorporation: ≥99% deuterated forms (d_1-d_4); ≤1% d_0
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

Bezafibrate-d_4 is intended for use as an internal standard for the quantification of bezafibrate (Item No. 10009145) 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).

Bezafibrate-d_4 is supplied as a solid. A stock solution may be made by dissolving the bezafibrate-d_4 in the solvent of choice, which should be purged with an inert gas. Bezafibrate-d_4 is slightly soluble in DMSO.

Description

Bezafibrate is a non-selective agonist of peroxisome proliferator-activated receptors (PPARs; EC_{50}s = 50, 60, and 20 µM for human PPARα, PPARγ, and PPARδ, respectively).[1] It reduces triglyceride levels and the size of lipid droplets in an oleic acid-induced HepaRG hepatocyte model of steatosis when used at a concentration of 25 µM.[2] Bezafibrate (10 mg/kg per day) reduces plasma VLDL and LDL mass and triglyceride and free fatty acid levels in a high-fructose plus lard diet-induced rat model of insulin resistance.[3]

References

1. Willson, T.M., Brown, P.J., Sternbach, D.D., *et al.* The PPARs: From orphan receptors to drug discovery. *J. Med. Chem.* **43(4),** 527-550 (2000).
2. Rogue, A., Anthérieu, S., Vluggens, A., *et al.* PPAR agonists reduce steatosis in oleic acid-overloaded HepaRG cells. *Toxicol. Appl. Pharmacol.* **276(1),** 73-81 (2014).
3. Matsui, H., Okumura, K., Kawakami, K., *et al.* Improved insulin sensitivity by bezafibrate in rats: Relationship to fatty acid composition of skeletal-muscle triglycerides. *Diabetes* **46(3),** 348-353 (1997).

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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