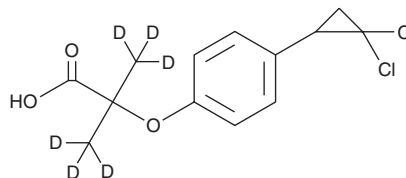


# PRODUCT INFORMATION



## Ciprofibrate-d<sub>6</sub> Item No. 33917

**CAS Registry No.:** 2070015-05-1  
**Formal Name:** 2-[4-(2,2-dichlorocyclopropyl)phenoxy]-2-methyl-d<sub>3</sub>-propanoic-3,3,3-d<sub>3</sub> acid  
**Synonyms:** (±)-Ciprofibrate-d<sub>6</sub>, WIN 35,833-d<sub>6</sub>  
**MF:** C<sub>13</sub>H<sub>8</sub>Cl<sub>2</sub>D<sub>6</sub>O<sub>3</sub>  
**FW:** 295.2  
**Chemical Purity:** ≥95% (Ciprofibrate)  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>6</sub>); ≤1% d<sub>0</sub>  
**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

Ciprofibrate-d<sub>6</sub> is intended for use as an internal standard for the quantification of ciprofibrate (Item No. 18515) 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).

Ciprofibrate-d<sub>6</sub> is supplied as a solid. A stock solution may be made by dissolving the ciprofibrate-d<sub>6</sub> in the solvent of choice, which should be purged with an inert gas. Ciprofibrate-d<sub>6</sub> is soluble in acetonitrile, methanol, and DMSO.

### Description

Ciprofibrate is an agonist of peroxisome proliferator-activated receptor  $\alpha$  (PPAR $\alpha$ ; EC<sub>50</sub> = 0.9  $\mu$ M in a transactivation assay).<sup>1</sup> It is selective for PPAR $\alpha$  over PPAR $\gamma$  and PPAR $\delta$  at 300  $\mu$ M.<sup>2</sup> Ciprofibrate (250  $\mu$ M) induces cell cycle arrest at the G<sub>2</sub>/M and S phases in Fao rat, but not HepG2 human, hepatocellular carcinoma cells.<sup>3</sup> It decreases fasting plasma levels of triglycerides and increases fasting plasma glucose levels in the apolipoprotein CIII transgenic mouse model of hypertriglyceridemia when administered at a dose of 10 mg/kg.<sup>4</sup> Formulations containing ciprofibrate have been used in the treatment of hypertriglyceridemia.

### References

1. Quang, T.H., Ngan, N.T.T., Minh, C.V., *et al.* Anti-inflammatory and PPAR transactivational effects of secondary metabolites from the roots of *Asarum sieboldii*. *Bioorg. Med. Chem. Lett.* **22(7)**, 2527-2533 (2012).
2. Evans, R.M. Hypolipidemic drugs, polyunsaturated fatty acids, and eicosanoids are ligands for peroxisome proliferator-activated receptors  $\alpha$  and  $\delta$ . *Proc. Natl. Acad. Sci. USA* **94(9)**, 4312-4317 (1997).
3. Passilly, P., Jannin, B., Hassell, S.J., *et al.* Human HepG2 and rat Fao hepatic-derived cell lines show different responses to ciprofibrate, a peroxisome proliferator: analysis by flow cytometry. *Exp. Cell. Res.* **223(2)**, 436-442 (1996).
4. Bighetti, E.J.B., Patricio, P.R., Casquero, A.C., *et al.* Ciprofibrate increases cholesteryl ester transfer protein gene expression and the indirect reverse cholesterol transport to the liver. *Lipids Health Dis.* **8**, 50 (2009).

#### 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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