# **PRODUCT** INFORMATION



Hydroxy Pioglitazone

Item No. 28043

146062-44-4		
5-[[4-[2-[5-(1-hydroxyethyl)-2-		
pyridinyl]ethoxy]phenyl]methyl]-	OH	_
2,4-thiazolidinedione		$\sim$ $\sim$ $\parallel$
C <sub>19</sub> H <sub>20</sub> N <sub>2</sub> O <sub>4</sub> S	N	
372.4		N—H
≥95%		∕ °√
A solid	0	Ó
-20°C		
≥4 years		
	5-[[4-[2-[5-(1-hydroxyethyl)-2- pyridinyl]ethoxy]phenyl]methyl]- 2,4-thiazolidinedione $C_{19}H_{20}N_2O_4S$ 372.4 ≥95% A solid -20°C	5-[[4-[2-[5-(1-hydroxyethyl)-2- pyridinyl]ethoxy]phenyl]methyl]- 2,4-thiazolidinedione $C_{19}H_{20}N_2O_4S$ 372.4 $\geq$ 95% A solid -20°C

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

## Laboratory Procedures

Hydroxy pioglitazone is supplied as a solid. A stock solution may be made by dissolving the hydroxy pioglitazone in the solvent of choice. Hydroxy pioglitazone is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas.

## Description

Hydroxy pioglitazone is a major metabolite of the peroxisome proliferator-activated receptor y (PPARy) agonist pioglitazone (Item Nos. 71745 | 22263 | 10028).<sup>1</sup> It is formed from pioglitazone by the cytochrome P450 (CYP) isoform CYP2C8 with minor contributions from CYP3A4.<sup>2</sup> Hydroxy pioglitazone binds to PPARy (K<sub>i</sub> = 1.2  $\mu$ M) and activates PPAR $\gamma$  in a time-resolved FRET (TR-FRET) assay (EC<sub>50</sub> = 2.1  $\mu$ M).<sup>1</sup>

## References

- 1. Mosure, S.A., Shang, J., Eberhardt, J., et al. Structural basis of altered potency and efficacy displayed by a major in vivo metabolite of the antidiabetic PPARγ drug pioglitazone. J. Med. Chem. 62(4), 2008-2023 (2019).
- 2. Jaakkola, T., Backman, J.T., Neuvonen, M., et al. Effect of rifampicin on the pharmacokinetics of pioglitazone. Br. J. Clin. Pharmacol. 61(1), 70-78 (2005).

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.

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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