

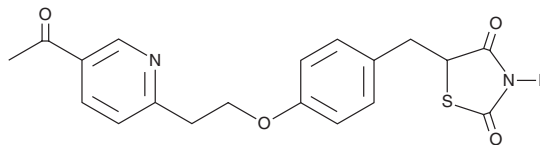
PRODUCT INFORMATION



Pioglitazone Ketone

Item No. 28044

CAS Registry No.: 146062-45-5
Formal Name: 5-[[4-[2-(5-acetyl-2-pyridinyl)ethoxy]phenyl]methyl]-2,4-thiazolidinedione
Synonym: Ketopioglitazone
MF: C₁₉H₁₈N₂O₄S
FW: 370.4
Purity: ≥98%
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

Pioglitazone ketone is supplied as a solid. A stock solution may be made by dissolving the pioglitazone ketone in the solvent of choice, which should be purged with an inert gas. Pioglitazone ketone is soluble in chloroform.

Description

Pioglitazone ketone is an active metabolite of the PPAR γ agonist pioglitazone (Item Nos. 71745 | 10028 | 22263).¹⁻³ Formation of pioglitazone ketone occurs primarily through cytochrome P450 (CYP) isoform CYP2C8-mediated metabolism of pioglitazone.^{1,2} Pioglitazone ketone (100 mg/kg in the diet) reduces blood glucose levels in a KKAY mouse model of type 2 diabetes.³

References

1. Kawaguchi-Suzuki, M., Bril, F., Sanchez, P.P., *et al.* A validated liquid chromatography tandem mass spectrometry method for simultaneous determination of pioglitazone, hydroxypioglitazone, and ketopioglitazone in human plasma and its application to a clinical study. *J. Chromatogr. B. Analyt. Technol. Biomed. Life Sci.* **969**, 219-223 (2014).
2. Jaakkola, T., Laitila, J., Neuvonen, P.J., *et al.* Pioglitazone is metabolised by CYP2C8 and CYP3A4 *in vitro*: Potential for interactions with CYP2C8 inhibitors. *Basic Clin. Pharmacol. Toxicol.* **99(1)**, 44-51 (2006).
3. Tanis, S.P., Parker, T.T., Colca, J.R., *et al.* Synthesis and biological activity of metabolites of the antidiabetic, antihyperglycemic agent pioglitazone. *J. Med. Chem.* **39(26)**, 5053-5063 (1996).

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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