LKT Laboratories, Inc.

# Febuxostat

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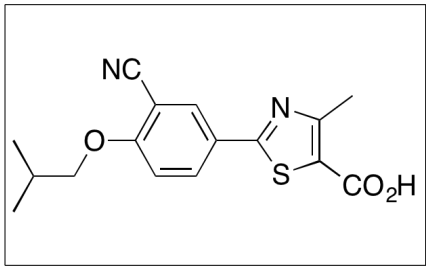
## Product Information

**Product ID** F1607
**CAS No.** 144060-53-7
**Chemical Name** 2-(3-cyano-4-isobutoxyphenyl)-4-methyl-1,3-thiazole-5-carboxylic acid
**Synonym**




**Formula** $C_{16}H_{16}N_2O_3S$
**Formula Wt.** 316.37
**Melting Point**
**Purity** ≥98%
**Solubility**

***Bulk quanitites available upon request***

| Product ID | Size |
|---|---|
| F1607 | 50 mg |
| F1607 | 250 mg |
| F1607 | 1 g |

**Store Temp** Ambient
**Ship Temp** Ambient

**Description** Febuxostat displays a variety of beneficial properties, including anti-inflammatory, anti-hyperuricemic, antidepressant, and nephroprotective activities. Febuxostat inhibits xanthine oxidase, preventing the generation of uric acid; as a result, it is used clinically to treat gout. In vitro, febuxostat inhibits MCP-1 and ROS production through activation of MAPK phosphatase. In vivo, febuxostat decreases oxidative stress and endoplasmic reticular stress, preventing increases in serum creatine and occurrence of renal tubular injury and fibrosis during renal ischemia. Additionally, this compound decreased immobility time during a forced swim test in animal models of depression.

**References**

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Tsuda H, Kawada N, Kaimori JY, et al. Febuxostat suppressed renal ischemia-reperfusion injury via reduced oxidative stress. Biochem Biophys Res Commun. 2012 Oct 19;427(2):266-72. PMID: 22995295.

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