

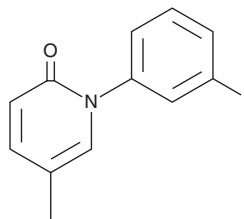
PRODUCT INFORMATION



Fluorofenidone

Item No. 39651

CAS Registry No.: 848353-85-5
Formal Name: 1-(3-fluorophenyl)-5-methyl-2(1H)-pyridinone
Synonym: AKF-PD
MF: C₁₂H₁₀FNO
FW: 203.2
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

Fluorofenidone is supplied as a solid. A stock solution may be made by dissolving the fluorofenidone in the solvent of choice, which should be purged with an inert gas. Fluorofenidone is soluble in acetonitrile and DMSO.

Description

Fluorofenidone is an antifibrotic agent and a derivative of pirfenidone (Item No. 13986).^{1,2} It inhibits angiotensin II-induced increases in TGF-β1 secretion and reactive oxygen species (ROS) production, as well as TGF-β1-induced production of collagen I, in NRK-52E rat proximal tubular epithelial cells when used at a concentration of 8 mM.¹ Fluorofenidone (500 mg/kg) decreases disease severity and the renal levels of collagen I, collagen III, and connective tissue growth factor (CTGF) in a rat model of obstructive nephropathy induced by unilateral ureteral obstruction.² Fluorofenidone also increases survival in a mouse model of LPS-induced endotoxemia when administered at a dose of 200 mg/kg.³

References

1. Peng, Z.Z., Hu, G.Y., Shen, H., *et al.* Fluorofenidone attenuates collagen I and transforming growth factor-β1 expression through a nicotinamide adenine dinucleotide phosphate oxidase-dependent way in NRK-52E cells. *Nephrology (Carlton)* **14(6)**, 565-572 (2009).
2. Li, B.-X., Tang, Y.-T., Wang, W., *et al.* Fluorofenidone attenuates renal interstitial fibrosis in the rat model of obstructive nephropathy. *Mol. Cell. Biochem.* **354(1-2)**, 263-273 (2011).
3. Tang, Y., Li, B., Wang, N., *et al.* Fluorofenidone protects mice from lethal endotoxemia through the inhibition of TNF-α and IL-1β release. *Int. Immunopharmacol.* **10(5)**, 580-583 (2010).

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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