# PRODUCT INFORMATION



# TP-0472993

Item No. 39757

CAS Registry No.: 2126874-77-7

Formal Name: 1-[4-[[[6-(1H-pyrazol-3-yl)-3-pyridinyl]

oxy[methyl]-1-piperidinyl]-ethanone

MF:  $C_{16}H_{20}N_4O_2$ 

FW: 300.4 **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**

TP-0472993 is supplied as a solid. A stock solution may be made by dissolving the TP-0472993 in the solvent of choice, which should be purged with an inert gas. TP-0472993 is sparingly soluble (1-10 mg/ml) in DMSO.

#### Description

TP-0472993 is an inhibitor of the cytochrome P450 (CYP) isoforms CYP4A11 and CYP4F2 (IC<sub>50</sub>s = 140 and 40 nM, respectively). 1 It is selective for CYP4A11 and CYP4F2 over a panel of eight additional CYPs at 10  $\mu$ M. TP-0472993 inhibits 20-HETE (Item No. 90030) production in rat renal microsomes (IC<sub>50</sub> = 347 nM). In vivo, TP-0472993 (0.03-1 mg/kg) inhibits 20-HETE production in rats. It also reduces renal fibrosis and IL-1 $\beta$  and TNF- $\alpha$  levels in a mouse model of folic acid-induced nephropathy and a mouse model of unilateral ureteral obstruction-induced neuropathy when administered at a dose of 3 mg/kg.<sup>2</sup>

### References

- 1. Kawamura, M., Kobashi, Y., Tanaka, H., et al. Discovery of novel pyrazolylpyridine derivatives for 20-hydroxyeicosatetraenoic acid synthase inhibitors with selective CYP4A11/4F2 inhibition. J. Med. Chem. 65(21), 14599-14613 (2022).
- 2. Hirata, T., Ohara, H., Kojima, N., et al. Renoprotective effect of TP0472993, a novel and selective 20-hydroxyeicosatetraenoic acid synthesis inhibitor, in mouse models of renal fibrosis. J. Pharmacol. Exp. Ther. 386(1), 56-69 (2023).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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