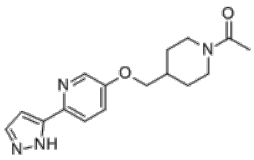
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Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	TP0472993
Cat. No.	:	PC-20707
CAS No.	:	2126874-77-7
Molecular Formula	:	$C_{16}H_{20}N_4O_2$
Molecular Weight	:	300.36
Target	:	Cytochrome P450 (CYPs)
Solubility	:	10 mM in DMSO



CAS: 2126874-77-7

Biological Activity

TP0472993 is a potent, selective 20-Hydroxyeicosatetraenoic acid (**20-HETE)** synthesis inhibitor, inhibits 20-HETE formation in human and rat renal microsomes with IC50 of 29 and 347 nM, respectively.
TP0472993 concentration dependently inhibits 20-HETE production by **CYP4F2** and **CYP4A11** with IC50 values of 37 and 425 nM, respectively.
TP0472993 displays no an apparent affinity for 55 representative receptors, enzymes, ion channels and transporters at 30 uM.
Chronic treatment with TP0472993 (0.3 and 3 mg/kg, twice a day) attenuated the degree of kidney fibrosis in the folic acid nephropathy and the unilateral ureteral obstruction (UUO) mice.
TP0472993 reduced renal inflammation, as demonstrated by markedly reducing IL-1β and TNF-α levels in the renal tissue.
TP0472993 suppressed the kidney fibrosis progression via a reduction in the ERK1/2 and STAT3 signaling pathway.

References

Takashi Hirata, et al. ***J Pharmacol Exp Ther***. 2023 May 4;JPET-AR-2022-001521.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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