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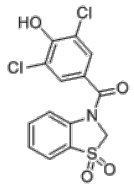
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	Dotinurad
Cat. No.	:	PC-60041
CAS No.	:	1285572-51-1
Molecular Formula	:	$C_{14}H_9Cl_2NO_4S$
Molecular Weight	:	358.189
Target	:	URAT1
Solubility	:	10 mM in DMSO



Biological Activity

Dotinurad is a potent and selective urate transporter 1 (**URAT1**) inhibitor with IC50 of 37.2 nM.
Dotinurad weakly inhibited ATP-binding cassette subfamily G member 2 (ABCG2), organic anion transporter 1 (OAT1), and OAT3, with IC50 values of 4.16, 4.08, and 1.32 μM, respectively, indicating higher selectivity for URAT1.
Dotinurad (1-30 mg/kg) decreased plasma urate levels and increased fractional excretion of urate (FEUA) in a dose-dependent manner in Cebus monkeys.
Dotinurad is a potent and selective urate reabsorption inhibitor is characterized by increased efficacy with decreasing plasma urate levels.

References

Tetsuya Taniguchi, et al. ***J Pharmacol Exp Ther.*** 2019 Oct;371(1):162-170.
2. Hosoya T, et al. ***Clin Exp Nephrol.*** 2020 Mar;24(Suppl 1):53-61.

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