

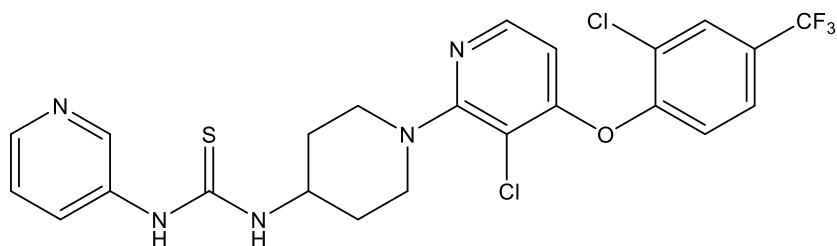
Catalog # 10-3712

DO264

CAS# 2301866-59-9

1-(1-(3-Chloro-4-(2-chloro-4-(trifluoromethyl)phenoxy)pyridin-2-yl)piperidin-4-yl)-3-(pyridin-3-yl)thiourea

Lot # X108295



A potent, reversible competitive inhibitor of ABHD12 (α/β -hydrolase domain-containing 12) which shows negligible interaction with other serine hydrolases as determined by activity-based protein profiling.¹ The IC_{50} of DO264 was determined to be 11 nM in isolated enzyme assays and it was shown to be active *in vivo* and brain penetrant. The compound was shown to produce significant elevation of brain lyso-PS/PI and C20:4 PS content in mice.² THP-1 macrophages show increased cytokine production and mice show exacerbated immune responses to LCMV infection after treatment with DO264.^{1,2} Cellular studies should be limited to a concentration of 1 μ M which is sufficient to fully inhibit ABDH12 and avoid cytotoxicity.¹ Treatment of mice may be done at 30 mg/Kg po or ip with no overt signs of toxicity.¹

- 1) Ogasawara *et al.* (2019), *Discovery and Optimization of Selective and in Vivo Active Inhibitors of the Lysophosphatidylserine Lipase α/β -Hydrolase Domain-Containing 12 (ABHD12)*; J. Med. Chem., **62** 1643
- 2) Ogasawara *et al.* (2018), *Selective Blockade of the Lyso-PS Lipase ABHD12 Stimulates Immune Responses In Vivo*; Nat. Chem. Biol., **14** 1099

PHYSICAL DATA

Molecular Weight:	542.40
Molecular Formula:	C ₂₃ H ₂₀ Cl ₂ F ₃ N ₅ OS
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (30 mg/ml)
Physical Description:	Pale-yellow powder
Storage and Stability:	Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 1 month.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.