

Catalog # 10-1511 SR9009

CAS# 1379686-30-2 (free base)

Ethyl 3-(((4-chlorobenzyl)((5-nitrophen-2-yl)methyl)amino)methyl)pyrrolidine-1-carboxylate hydrochloride Lot # S102009

Agonist at nuclear receptor Rev-ErbA 1 . Greatly diminishes VILI-induced lung edema, inflammatory cell infiltration and TNF α production in a rat lung injury model 2 . Suppresses atherosclerosis in a mouse model 3 . Specifically lethal to cancer cells and oncogene-induced senescent cells with no effect on the viability of normal cells or tissues. 4 Disrupts pain associated with osteoarthritis by reducing BMAL1 expression in bmal1f/fNav1.8CreERT mice. 5

- 1) Solt et al. (2012) Regulation of circadian behaviour and metabolism by synthetic REV-ERB agonists; Nature 485 62
- 2) Li et al. (2014) A study on circadian rhythm disorder of rat lung tissue caused by mechanical ventilation induced lung injury; Int.Immunopharmacol. **18** 249
- 3) Sitaula et al. (2015) Suppression of atherosclerosis by synthetic REV-ERB agonist; Biochem.Biophys.Res.Commun. 460 566
- 4) Sulli et al. (2018) Pharmacological activation of REV-ERBs is lethal in cancer and oncogene-induced senescence; Nature, **553** 351
- 5) Das et al. (2018) Pharmacological targeting of the mammalian clock reveals a novel analgesic for osteoarthritis-induced pain; Gene 655 1

PHYSICAL DATA

Molecular Weight: 474.40

Molecular Formula: C₂₀H₂₄ClN₃O₄S·HCl Purity: >98% by TLC

NMR: (Conforms)

Solubility: DMSO (>25 mg/ml) or ethanol (up to 20 mg/ml)

Physical Description: Tan solid

Storage and Stability: Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in

DMSO or ethanol may be stored at -20°C for up to 1 month.

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