

PRODUCT INFORMATION



SR9011

Item No. 11930

CAS Registry No.: 1379686-29-9

Formal Name: 3-[[[(4-chlorophenyl)methyl][(5-nitro-2-thienyl)methyl]amino]methyl]-N-pentyl-1-pyrrolidinecarboxamide

MF: C₂₃H₃₁ClN₄O₃S

FW: 479.0

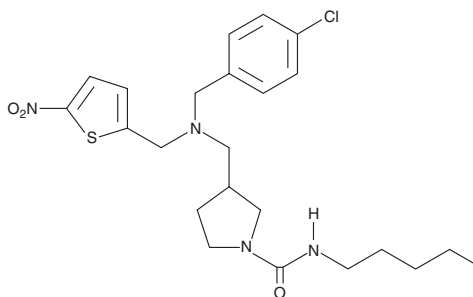
Purity: ≥98%

UV/Vis.: λ_{max}: 325 nm

Supplied as: A crystalline 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

SR9011 is supplied as a crystalline solid. A stock solution may be made by dissolving the SR9011 in the solvent of choice, which should be purged with an inert gas. SR9011 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of SR9011 in ethanol is approximately 14 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Description

SR9011 is a REV-ERB agonist that increases the constitutive repression of genes regulated by REV-ERBα and REV-ERBβ with IC₅₀ values of 790 and 560 nM, respectively.¹ It has no activity at other nuclear receptors. SR9011 blocks the activity of the suprachiasmatic nucleus (SCN) clock, with reversible inhibition of circadian oscillation in SCN explants cultured from *Per2-luc* reporter mice.¹ The circadian pattern of expression of several metabolic genes in liver, skeletal muscle, and adipose tissue was also shown to be altered in mice exposed to SR9011, resulting in increased energy expenditure.¹

Reference

1. Solt, L.A., Wang, Y., Banerjee, S., *et al.* Regulation of circadian behaviour and metabolism by synthetic REV-ERB agonists. *Nature* **485**(7396), 62-68 (2012).

WARNING

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

SAFETY DATA

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.

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