

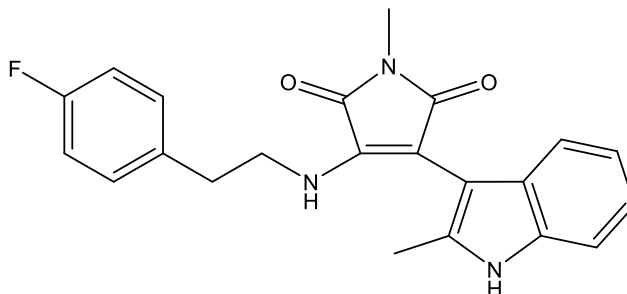
Catalog # 10-5125

IM-12

CAS# 1129669-05-1

3-(4-Fluorophenylethylamino)-1-methyl-4-(2-methyl-1H-indol-3-yl)-1H-pyrrole-2,5-dione

Lot # X109883



A potent and selective inhibitor of glycogen synthase kinase 3 β (GSK-3 β) IC₅₀=53 nM which induces neuronal differentiation.¹ Activates the Wnt- β -catenin signaling pathway and attenuates tissue plasminogen activator-induced hemorrhagic transformation after acute ischemic stroke in animal models.² Promoted hair follicle growth *in vitro* and antagonized the inhibition of hair follicles by dihydrotestosterone.³ Down-regulates Sox9 expression in limbal epithelial stem/progenitor cells leading to increased differentiation.⁴

- 1) Schmöle *et al.* (2010), *Novel indolylmaleimide acts as GSK-3beta inhibitor in human neural progenitor cells*; Bioorg. Med. Chem., **18** 6785
- 2) Wang *et al.* (2019), *IM-12 activates the Wnt- β -catenin signaling pathway and attenuates rtPA-induced hemorrhagic transformation in rats after acute ischemic stroke*; Cell Biol., **97** 702
- 3) Chen *et al.* (2020), *Discovery of the FDA-approved drugs bexarotene, cetilistat, diiodohydroxyquinoline and abiraterone as potential covid-19 treatments with a robust two-tier screening system.*; Front. Pharmacol., **10** 1528
- 4) Menzel-Severing *et al.* (2018), *Transcription factor profiling identifies Sox9 as regulator of proliferation and differentiation in corneal epithelial stem/progenitor cells*; Sci. Rep., **8** 10268

PHYSICAL DATA

Molecular Weight:	377.41
Molecular Formula:	C ₂₂ H ₂₀ FN ₃ O ₂
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 50 mg/ml)
Physical Description:	Yellow solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 2 months.

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