



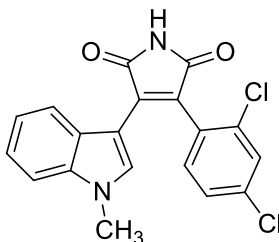
Catalog # 10-2338

SB 216763

CAS# 280744-09-4

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

Lot # X105613



Potent and selective inhibitor of glycogen synthase kinase-1 (GSK-3) $IC_{50}=34.3 \text{ nM}^1$. Acts at the ATP-binding domain. Displays protective effects in lung fibrosis mouse model². Displays neuroprotective effects on cultured neurons³. Maintains mouse embryonic stem cells in a pluripotent state⁴. Cell permeable.

- 1) Coghlan *et al.* (2000), *Selective small molecule inhibitors of glycogen synthase kinase-3 modulate glycogen metabolism and gene transcription*; Chem. Biol., **7** 793
- 2) Gurrieri *et al.* (2010), *3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-1H-pyrrole-2,5-dione (SB216763), a glycogen synthase kinase-3 inhibitor, displays therapeutic properties in a mouse model of pulmonary inflammation and fibrosis*; J. Pharmacol. Exp. Ther., **332** 785
- 3) Cross *et al.* (2001), *Selective small-molecule inhibitors of glycogen synthase kinase-3 activity protect primary neurones from death*; J. Neurochem., **77** 94
- 4) Kirby *et al.* (2012), *Glycogen synthase kinase 3 (GSK3) inhibitor, SB-216763, promotes pluripotency in mouse embryonic stem cells*; PLoS One, **7** e39329

PHYSICAL DATA

Molecular Weight:	371.23
Molecular Formula:	C ₁₉ H ₁₂ Cl ₂ N ₂ O ₂
Purity:	98% by TLC [1% CH ₃ OH in CH ₂ Cl ₂ ; R _f = 0.17] NMR: (Conforms)
Solubility:	DMSO (up to 25 mg/ml)
Physical Description:	Orange solid
Storage and Stability:	Store as supplied desiccated at room temperature for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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