

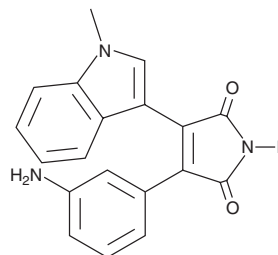
PRODUCT INFORMATION



CP21R7

Item No. 20573

CAS Registry No.: 125314-13-8
Formal Name: 3-(3-aminophenyl)-4-(1-methyl-1H-indol-3-yl)-1H-pyrrole-2,5-dione
MF: C₁₉H₁₅N₃O₂
FW: 317.3
Purity: ≥98%
UV/Vis.: λ_{max}: 222, 431 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

CP21R7 is supplied as a crystalline solid. A stock solution may be made by dissolving the CP21R7 in the solvent of choice, which should be purged with an inert gas. CP21R7 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of CP21R7 in these solvents is approximately 1 mg/ml.

Description

CP21R7 is a potent and selective inhibitor of GSK3β.¹ It is used as an activator of stem cells prior to the induction of differentiation of stem cells to endothelial and smooth muscle cells.²⁻⁴ GSK3β inhibitors, including CP21R7, can be used with BMP4 to commit human pluripotent stem cells to a mesodermal fate.^{3,4}

References

1. Gong, L., Hirschfeld, D., Tan, Y.-C., *et al.* Discovery of potent and bioavailable GSK-3β inhibitors. *Bioorg. Med. Chem. Lett.* **20(5)**, 1693-1696 (2010).
2. Christensen, K., Graf, M., Iacone, R., *et al.* Method for differentiation of pluripotent stem cells into vascular bed cells. US 2015/0017674 A1 (2015), 14/100,831.
3. Patsch, C., Challet-Meylan, L., Thoma, E.C., *et al.* Generation of vascular endothelial and smooth muscle cells from human pluripotent stem cells. *Nat. Cell Biol.* **17(8)**, 994-1003 (2015).
4. Sahara, M., Hansson, E.M., Wernet, O., *et al.* Manipulation of a VEGF-Notch signaling circuit drives formation of functional vascular endothelial progenitors from human pluripotent stem cells. *Cell Res.* **24(7)**, 820-841 (2014).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/14/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM