

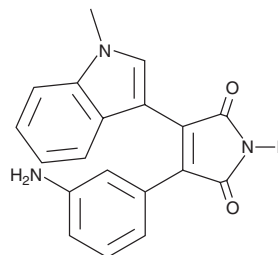
# PRODUCT INFORMATION



## 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:** C<sub>19</sub>H<sub>15</sub>N<sub>3</sub>O<sub>2</sub>  
**FW:** 317.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 222, 431 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly



### Laboratory Procedures

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

### Description

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

### 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.

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