

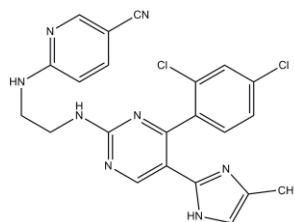
## CHIR99021

**ALTERNATE NAME** 6-((2-((4-(2,4-Dichlorophenyl)-5-(4-methyl-1H-imidazol-2-yl)pyrimidin-2-yl)amino)ethyl)amino)nicotinonitrile; CT99021

**CATALOG #:** 1677-5, 25

**AMOUNT:** 5 mg, 25 mg

**STRUCTURE:**



**MOLECULAR FORMULA:** C<sub>22</sub>H<sub>18</sub>Cl<sub>2</sub>N<sub>8</sub>

**MOLECULAR WEIGHT:** 465.34

**CAS NUMBER:** 252917-06-9

**APPEARANCE:** Off-white solid

**SOLUBILITY:** DMSO (100 mM)

**PURITY:** ≥ 95 % by HPLC

**STORAGE:** Store at -20°C. Protect from air and light

**DESCRIPTION:** A potent and highly selective inhibitor of glycogen synthase kinase-3β (GSK-3β) (IC<sub>50</sub> = 6.7 nM). CHIR99021 has been shown to allow for long-term expansion of murine embryonic stem cells in a chemically-defined medium in conjunction with MEK/MAPK inhibitor PD184352 and fibroblast growth factor receptor (FGFR) inhibitor SU5402.

**REFERENCES:**

1. Ying, Q.-L. *et al.* (2008). *Nature* **453**, 519.
2. Sato, N., *et al.* (2004). *Nat. Med.* **10**, 55.
3. Ring, D.B., *et al.* (2003). *Diabetes* **52**, 588.

**HANDLING:** Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

**FOR RESEARCH USE ONLY! Not to be used in humans.**

**RELATED PRODUCTS:**

- BIO (Cat. No. 1673-1)
- CHIR CHIR99021 (Cat. No. 1677-5, 25)
- GSK-3 Inhibitor, TWS119 (Cat. No. 1655-2)
- PD-0325901 (Cat. No. 1643-2)
- Pyrintegrin (Cat. No. 1629-1,5)
- EZSolution™ Pyrintegrin (Cat. No. 1737-1)
- SB-431542 (Cat. No. 1674-1)
- Thiazovivin (Cat. No. 1681-1,5)
- Y-27632, 2HCl (Cat. No. 1596-1,5,50)