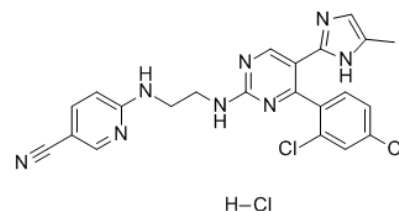


**Product Name** : CHIR-99021 monohydrochloride  
**Cat. No.** : PC-42429  
**CAS No.** : 1797989-42-4  
**Molecular Formula** : C<sub>22</sub>H<sub>19</sub>Cl<sub>3</sub>N<sub>8</sub>  
**Molecular Weight** : 501.7989  
**Target** : GSK-3  
**Solubility** : 10 mM in DMSO  
4. Li W, et al. Stem Cells. 2009 Dec;27(12):2992-3000.



## Biological Activity

A potent, specific GSK-3 inhibitor with IC<sub>50</sub> of 5 nM and 10 nM for GSK3 $\beta$  and GSK3 $\alpha$ , respectively; mimics Wnt signaling in preadipocytes, stabilizes free cytosolic beta-catenin and inhibits adipogenesis by blocking induction of C/EBP $\alpha$  and PPAR $\gamma$ ; potentiates insulin activation of glucose transport and utilization in vitro and in vivo; also widely used for stem cell differentiation and naive stem cell generation.

## References

- Ying QL, et al. Nature. 2008 May 22;453(7194):519-23.  
Ring DB, et al. Diabetes. 2003 Mar;52(3):588-95.  
Bennett CN, et al. J Biol Chem. 2002 Aug 23;277(34):30998-1004.

