

Data Sheet

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Product Name : CHIR-99021 trihydrochloride

Cat. No. : PC-42430
CAS No. : 1782235-14-6
Molecular Formula : C₂₂H₂₁Cl₅N₈
Molecular Weight : 574.7208
Target : GSK-3

Solubility : DMSO: ≥ 32 mg/mL

Biological Activity

CHIR-99021 (Laduviglusib) trihydrochloride is a potent, specific **GSK-3** inhibitor with IC50 of 5 nM and 10 nM for GSK3 β and GSK3 α , respectively.

CHIR-99021 mimics Wnt signaling in preadipocytes, stabilizes free cytosolic beta-catenin and inhibits adipogenesis by blocking induction of $C/EBP\alpha$ and $PPAR\gamma$.

CHIR-99021 potentiates insulin activation of glucose transport and utilization in vitro and in vivo.

CHIR-99021 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.

Li W, et al. Stem Cells. 2009 Dec;27(12):2992-3000.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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