MOLNOVA
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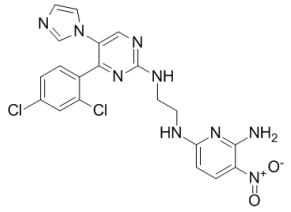
Datasheet (Version 1.0)

Product Name	:	CHIR-98014
Synonyms	:	CHIR98014;CHIR 98014
Cat No.	:	M13748
CAS Number	:	252935-94-7
Molecular Formula	:	C20H17Cl2N9O2
Formula Weight	:	486.31
Chemical Name	:	2,6-Pyridinediamine, N6-[2-[[4-(2,4-dichlorophenyl)-5-(1H-imidazol-1-yl)-2-pyrimidinyl]amino]ethyl]-3-nitro-
Description	:	CHIR-98014 is a potent, selective glycogen synthase kinase 3 (GSK-3) withIC50 of 0.65 and 0.58 nM for GSK-3α and GSK-3β, respectively; shows less potent activities against 20 other protein kinases including Cdc2 and Erk2; causes GS stimulation in CHO-IR cells and rat hepatocytes, with EC50s of 106 nM and 107 nM, respectively; reduces the viability of ES-CCE cells with IC50 of 1.1 uM, results in a significant activation of the Wnt/beta-catenin pathway in ES-D3 cells combined with CHIR-99021; significantly reduces fasting hyperglycemia within and shows improved glucose disposal in diabetic and insulin-resistant db/db mice.
Pathway	:	PI3K/Akt/mTOR signaling
Target	:	GSK-3
Receptor	:	bFGFR;c-Src;GSK-3α;GSK-3β;p70S6K
Solubility	:	DMSO: 11 mg/mL
SMILES	:	NC1=C(C=CC(NCCNC2=NC=C(N3C=CN=C3)C(=N2)C2=C(Cl)C=C(Cl)C=C2)=N1)[N+]([O-])=O
Storage	:	(-20℃)
Stability	:	≥ 2 years
Reference	:	



1. Ring DB, et al. Diabetes. 2003 Mar;52(3):588-95.| 2. Lian X, et al. Cell Reports. 2015 Jan 13;4(1):170.