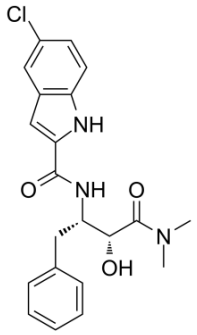
CP-91149

Cat. No.:	HY-13525
CAS No.:	186392-40-5
Molecular Formula:	$C_{21}H_{22}ClN_3O_3$
Molecular Weight:	399.87
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the COA.



BIOLOGICAL ACTIVITY

Description

CP-91149 is a **GP (glycogen phosphorylase)** inhibitor. CP-91149 promotes glycogen resynthesis, but not its overaccumulation. CP-91149 has the potential for Type II (insulin-dependent) diabetes study[1].

In Vitro

CP-91149 treatment decreases muscle GP activity by converting the phosphorylated AMP-independent α form into the dephosphorylated AMP-dependent b form and inhibiting GP α activity and AMP-mediated GP b activation[1]. CP-91149 (10, 30, 50 μM) inhibits brain GP and causes glycogen accumulation in A549 cells[2].

Cell Viability Assay[1]

Cell Line:	Cells were transduced with adenoviruses and incubated in the presence of 25 mM glucose for 2 days.
Concentration:	10 μM (glucose− or glucose+ for 18 h).
Incubation Time:	3 h.
Result:	Promoted the conversion of GP a into GP b, according to α model proposed in hepatocytes.

Western Blot Analysis[2]

Cell Line:	A549 cells.
Concentration:	0, 10, 30, 50 μM.
Incubation Time:	72 h.
Result:	A significant increase in glycogen accumulation was detected at 10 μM of CP-91149 as compared with untreated cells with a maximal glycogen accumulation at 30 μM. Intracellular glycogen content decreased at 50 μM CP-91149, perhaps explained by additional pharmacological effects of the drug. The dose-dependent accumulation of intracellular glycogen in A549 cells by CP-91149 indicates that CP-91149 inhibits brain GP in tissue culture.

Caution: Product has not been fully validated for medical applications. For research use only.

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