

Rosiptor

Catalog No: tcsc0030509



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

782487-28-9

Formula:

$C_{20}H_{35}NO_2$

Pathway:

Metabolic Enzyme/Protease

Target:

Phosphatase

Purity / Grade:

>98%

Solubility:

DMSO : 150 mg/mL (466.56 mM; Need ultrasonic and warming)

Alternative Names:

AQX-1125

Observed Molecular Weight:

321.5

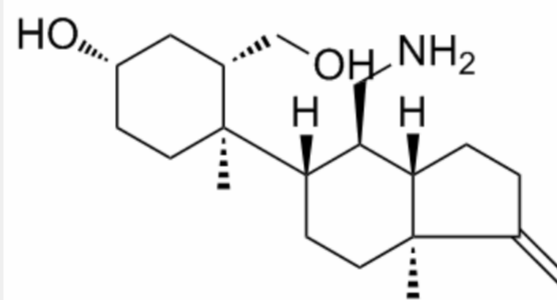
Product Description

Rosiptor is an activator of SH2-containing inositol-5'-phosphatase 1 (**SHIP1**).

IC50 & Target: SHIP1^[1]

In Vitro: Rosiptor is a small-molecule SHIP1 activator. The activating effect of Rosiptor on SHIP1 is 28% at 100 μM in the native enzyme but no effect of Rosiptor is observed when the SHIP1 ΔC2 enzyme is used. Rosiptor induces a concentration-dependent decrease in Akt phosphorylation in MOLT-4 cells, while it fails to affect Akt phosphorylation in Jurkat cells. At 0.1 μM Rosiptor the inhibition amounts to an average of 34%, while at 10 μM the inhibition amounts to an average of 82% in two independent experiments. Rosiptor also induces a concentration-dependent decrease in the production of multiple pro-inflammatory mediators in this system, without affecting cell viability. Rosiptor dose dependently inhibits chemotaxis of most cell types at low micromolar concentrations independent of the chemotactic stimulus^[1].

In Vivo: In female Sprague-Dawley rats, the single-dose pharmacokinetics of Rosiptor show that the increases in maximal plasma concentration (C_{max}) and $\text{AUC}_{0-\infty}$ are dose-proportional at the lower end of the dosing regimen and greater than dose proportional at the higher doses. The oral bioavailability of Rosiptor in rats is 66 and 85% at 10 and 30 mg/kg respectively. Oral bioavailability of Rosiptor in dogs is 88 and 104% at 10 and 30 mg/kg respectively. High tissue concentrations of Rosiptor are detected, as compared to plasma concentrations, at each time point studied^[1].



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