

# 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

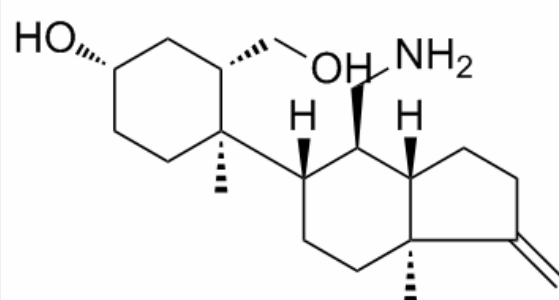
## Product Description

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

IC50 & Target: SHIP1<sup>[1]</sup>

**In Vitro:** Rosiptor is a small-molecule SHIP1 activator. The activating effect of Rosiptor on SHIP1 is 28% at 100  $\mu$ M in the native enzyme but no effect of Rosiptor is observed when the SHIP1 $\Delta$ C2 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  $\mu$ M Rosiptor the inhibition amounts to an average of 34%, while at 10  $\mu$ M 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<sup>[1]</sup>.

**In Vivo:** In female Sprague-Dawley rats, the single-dose pharmacokinetics of Rosiptor show that the increases in maximal plasma concentration ( $C_{max}$ ) and  $AUC_{0-\infty}$  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<sup>[1]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!