Web: www.taiclone.com
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# WAY 316606

## Catalog No: tcsc0996

### Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg

### Specifications

**CAS No:**
915759-45-4

**Formula:**
$C_{18}H_{19}F_3N_2O_4S_2$

**Pathway:**
Stem Cell/Wnt

**Target:**
sFRP-1

**Purity / Grade:**
>98%

**Solubility:**
10 mM in DMSO

**Observed Molecular Weight:**
448.48

## Product Description

WAY 316606 is an inhibitor of the secreted protein **sFRP-1**, an endogenous antagonist of the secreted glycoprotein **Wnt**. The affinity

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of WAY-316606 for sFRP-1 is determined using the FP binding assay with **$IC_{50}$** of 0.5 μM.

IC50 & Target: IC50: 0.5 μM (sFRP-1)[1]

***In Vitro:*** The $EC_{50}$ of WAY-316606 for Wnt-Luciferase Activity from U2-OS Cells is 0.65 μM[1]. WAY-316606 binds to secreted frizzled-related protein (sFRP)-1 inhibitor with a $K_D$ of 0.08 μM and inhibits sFRP-1 with an $EC_{50}$ of 0.65 μM. WAY-316606 also binds to sFRP-2, albeit over 10 times weaker with a $K_D$ of 1 μM. Using a fluorescence polarization binding assay that employs a fluorescent probe compound and purified human sFRP-1 protein in a competitive-binding format, the $IC_{50}$ for WAY-316606 is 0.5 μM[2].

***In Vivo:*** WAY-316606 increases bone formation when tested in a neonatal murine calvarial assay. WAY-316606 increases total bone area up to 60% in a dose-dependent manner with an EC50 of about 1 nM. WAY-316606 has good aqueous solubility, moderate to low inhibition of cytochrome p450 isozymes (3A4, 2D6, 2C9) and good stability in rat and human liver microsomes ($t_{1/2}$>60 min in each species). In female Sprague-Dawley rats, WAY-316606 exhibits high plasma clearance (77 mL/min/kg, greater than hepatic blood flow) following a single intravenous bolus dose (2 mg/kg), which results in a rapid decline of drug exposure in the plasma despite the route of administration[2].