

## FR194738 free base

Catalog No: tcsc0018455



### Available Sizes

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**Size:** 1mg

**Size:** 5mg

**Size:** 10mg



### Specifications

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**CAS No:**

204067-45-8

**Formula:**

$C_{27}H_{37}NO_2S$

**Pathway:**

Others

**Target:**

Others

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Observed Molecular Weight:**

439.65

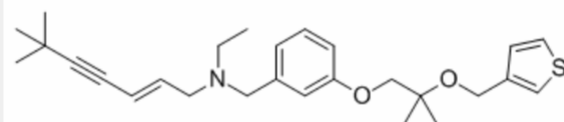
### Product Description

FR194738 free base is a **squalene epoxidase** inhibitor. FR194738 inhibits squalene epoxidase activity in HepG2 cell homogenates with an  $IC_{50}$  of 9.8 nM.

IC50 & Target: IC50: 9.8 nM (squalene epoxidase, in HepG2 cell homogenates)<sup>[1]</sup>

**In Vitro:** In intact HepG2 cells, FR194738 concentration-dependently inhibits the incorporation of [<sup>14</sup>C]acetate into free cholesterol and cholesteryl ester, with IC<sub>50</sub>s of 4.9 and 8.0 nM, respectively. FR194738 induces intracellular [<sup>14</sup>C]squalene accumulation. FR194738 increases the incorporation of [<sup>14</sup>C]acetate into squalene, an intermediate of cholesterol synthesis<sup>[1]</sup>. FR194738 potently inhibits squalene epoxidase (SE) in HepG2 cell homogenate and liver microsomes in dogs and rats. The inhibitory effect of FR194738 in comparison to the HMG-CoA reductase inhibitors, Simvastatin, Fluvastatin and Pravastatin, on cholesterol biosynthesis in HepG2 cells is examined. Among these compounds, FR194738 is the most potent, with an IC<sub>50</sub> of 2.1 nM. The IC<sub>50</sub>s of Simvastatin, Fluvastatin and Pravastatin are 40, 28 and 5100 nM, respectively<sup>[2]</sup>. FR194738 inhibits hamster liver microsomal squalene epoxidase activity in a concentration-dependent manner with an IC<sub>50</sub> of 14 nM<sup>[3]</sup>.

**In Vivo:** Serum lipid levels in hamsters after daily administration of FR194738 and Pravastatin for 10 d are measured. FR194738 reduces the serum levels of total, non high density lipoprotein (HDL) and HDL cholesterol, and triglyceride. Treatment of hamsters with FR194738 increases HMG-CoA reductase activity by 1.3-fold at 32 mg/kg compared to the control group and does not significantly change that at 100 mg/kg<sup>[3]</sup>.



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