

Pitavastatin

Catalog No: tcsc2110



Available Sizes

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

147511-69-1

Formula:

$C_{25}H_{24}FNO_4$

Pathway:

Metabolic Enzyme/Protease

Target:

HMG-CoA Reductase (HMGCR)

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Alternative Names:

NK-104

Observed Molecular Weight:

421.46

Product Description

Pitavastatin (NK-104) is a potent HMG-CoA reductase inhibitor, Pitavastatin inhibited cholesterol synthesis from acetic acid with an IC50 of 5.8 nM in a human liver cancer cell line (HepG2).

IC50 value: 5.8 nM(cholesterol synthesis from acetic

acid in HepG2) [1]

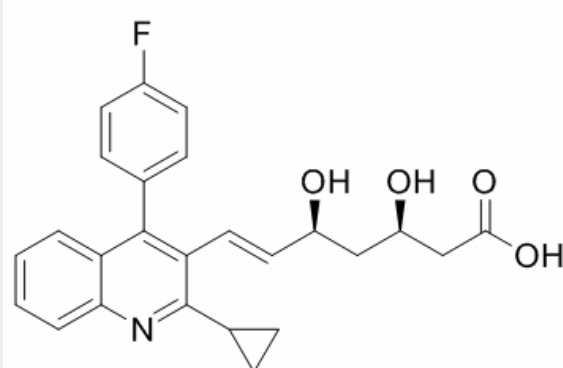
Target: HMG-CoA reductase

in vitro: Pitavastatin inhibited cholesterol synthesis from acetic

acid with an IC50 of 5.8 nM in a human liver cancer cell line (HepG2), which indicates that is 2.9 and 5.7 times as potent as simvastatin and atorvastatin, respectively. When the inhibitory activity interms of the ED50 was compared with that of simvastatin,

pitavastatin showed a 3-fold stronger activity in the rat and 15-fold stronger activity in a guinea pig model.²² The inhibitory effect of pitavastatin on sterol synthesis is thought to be liver-selective [1]. pitavastatin reduces total and phosphorylated tau levels in a cellular model of tauopathy, and in primary neuronal cultures. The decrease caused by pitavastatin is reversed by the addition of mevalonate, or geranylgeranyl pyrophosphate. The maturation of small G proteins, including RhoA was disrupted by pitavastatin, as was the activity of glycogen synthase kinase 3 β (GSK3 β), a major tau kinase [4].

in vivo: Intravenous treatment with pitavastatin-incorporated nanoparticles, but not with control nanoparticles or pitavastatin alone, inhibited plaque destabilization and rupture associated with decreased monocyte infiltration and gelatinase activity in the plaque[2].The EAM model was established in BALB/c mice by immunization with murine α -myosin heavy chain. Mice were fed pitavastatin (5 mg/kg) or vehicle once daily for 3 weeks from day 0 to day 21 after immunization [3].



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