



MK-4074

Solubility:

565.62

DMSO: 83.3 mg/mL (147.27 mM; Need ultrasonic)

Observed Molecular Weight:

Catalog No: tcsc0029249

卫	Available Sizes
Size:	5mg
Size:	10mg
Size:	25mg
Size:	50mg
Size:	100mg
	Specifications
CAS 1039	No: 758-22-9
Form	iula: 31 ^N 3 ^O 6
Path Metal	way: polic Enzyme/Protease
Targ Acety	et: ·I-CoA Carboxylase
Purit	y / Grade:



Product Description

MK-4074 is a liver-specific inhibitor of **acetyl-CoA carboxylase** ACC1 and ACC2 with IC_{50} values of approximately 3 nM.

IC50 & Target: IC50: 3 nM (Acetyl-CoA Carboxylase)[1]

In Vitro: MK-4074 strongly inhibits both ACC1 and ACC2 with IC_{50} values of approximately 3 nM. MK-4074 is highly liver specific because it is a substrate of organic anion transport protein (OATP) transporters that are present only in hepatocytes, and excretion of MK-4074 from hepatocytes into bile is dependent on the MRP2 efflux transporter^[1].

In Vivo: In male KKAy mice, a mouse model of obesity, type 2 diabetes, and fatty liver, a single oral dose of MK-4074 (0.3-3 mg/kg) significantly decreases DNL in a dose-dependent manner with an ID_{50} value of 0.9 mg/kg 1 hr post-administration. In a time course study, MK-4074 orally at 30 mg/kg reduces hepatic DNL by 83%, 70%, and 51% at 4, 8, and 12 hr post-dose, respectively. Single oral doses of MK-4074 at 30 and 100 mg/kg significantly increases plasma total ketones, a surrogate biomarker for hepatic FAO, by 1.5-fold to 3-fold for up to 8 hr^[1].

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