

Imeglimin (hydrochloride)

Catalog No: tcsc2121



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

775351-61-6

Formula:

$C_6H_{14}ClN_5$

Pathway:

Metabolic Enzyme/Protease

Target:

Mitochondrial Metabolism

Purity / Grade:

>98%

Solubility:

DMSO : 25 mg/mL (130.44 mM; Need ultrasonic)

Alternative Names:

EMD 387008 hydrochloride

Observed Molecular Weight:

191.66

Product Description

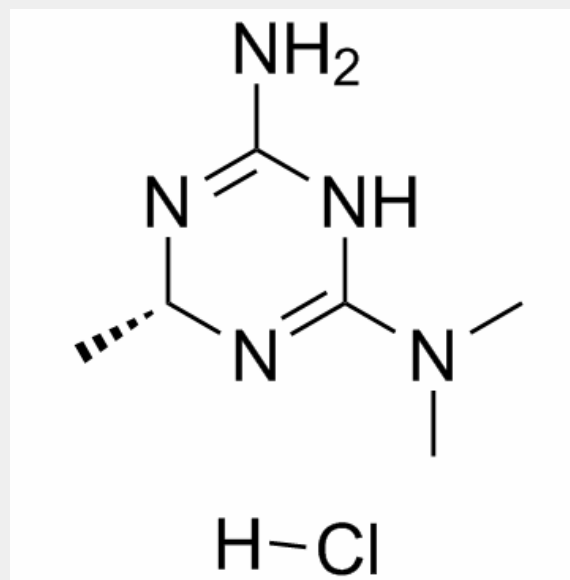
Imeglimin hydrochloride is the first antidiabetic compound that induces an increase in **mitochondrial phospholipid** composition, contributing to improvements in hepatic mitochondrial function.

IC50 & Target: Mitochondrial phospholipid^[1]

In Vitro: Imeglimin also reduces reactive oxygen species production and increases mitochondrial DNA. Imeglimin effects on mitochondrial phospholipid composition can participate in the benefit of Imeglimin on mitochondrial function. Imeglimin increases mtDNA content without modifying PGC1 α expression. Imeglimin amplifies the effects of high-fat, high-sucrose diet (HFHSD) on both cardiolipin and phosphatidylserine (PS) content, whereas it tends to restore phosphatidylcholine (PC), phosphatidylethanolamine (PE), and phosphatidylinositol (PI) content to normal values in HFHSD mitochondria

[1].

In Vivo: Imeglimin is administered orally at 200 mg/kg b.i.d. during the last 6 weeks of the HFHSD feeding protocol. A slight decrease in body weight and food intake associated with some diarrhea is observed but only during the first few days of treatment. Imeglimin significantly decreases hyperglycemia, restores normal glucose tolerance, and improves insulin sensitivity^[1].



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