Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Tinoridine hydrochloride

Catalog No: tcsc0039488

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
25913-34-2

Formula:
$C_{17}H_{21}ClN_2O_2S$

Pathway:
Metabolic Enzyme/Protease

Target:
Glutathione Peroxidase

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 31 mg/mL (87.85 mM)

Alternative Names:
Y-3642 hydrochloride

Observed Molecular Weight:
352.88

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Product Description

Tinoridine hydrochloride is a nonsteroidal anti-inflammatory drug and also has potent radical scavenger and antiperoxidative activity.

In Vitro: Tinoridine reduces a stable free radical, diphenyl-p-picrylhydrazyl, in the molar ratio of about 1:2, indicating its free radical scavenging ability. Tinoridine inhibits the lipid peroxidation in rat liver microsomes induced by xanthine-xanthine oxidase system in the presence of ADP and Fe^{2+}, in which hydroxyl radical is formed. Tinoridine is demonstrated to be oxidized in the course of the lipid peroxidation by following the fluorescence derived from the oxidation product of tinoridine. It is also oxidized by the xanthine-xanthine oxidase system in the presence of Fe^{2+}, but its oxidation is slow in the absence of Fe^{2+} and almost completely inhibited by catalase. Tinoridine is also oxidized by H_2O_2-Fe^{2+} system producing OH (Fenton reaction), but it does not affect the reduction of cytochrome c caused by superoxide radical[1].

In Vivo: CCl_4 aministration produces a marked decrease in the concentrations of liver microsomal cytochrome P-450 and G6Pase, indicating that hepatic endoplasmic reticulum function is disrupted. Prior treatment of the animals with tinoridine (100 mg/kg) significantly reduces the CCl_4-induced alterations in the enzyme activities, and a rapid recovery toward the normal values is observed[2].