

# **Tinoridine hydrochloride**

## Catalog No: tcsc0039488

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

**Size:** 100mg

**Specifications** 

CAS No:

25913-34-2

Formula:

 $C_{17}H_{21}CIN_2O_2S$ 

**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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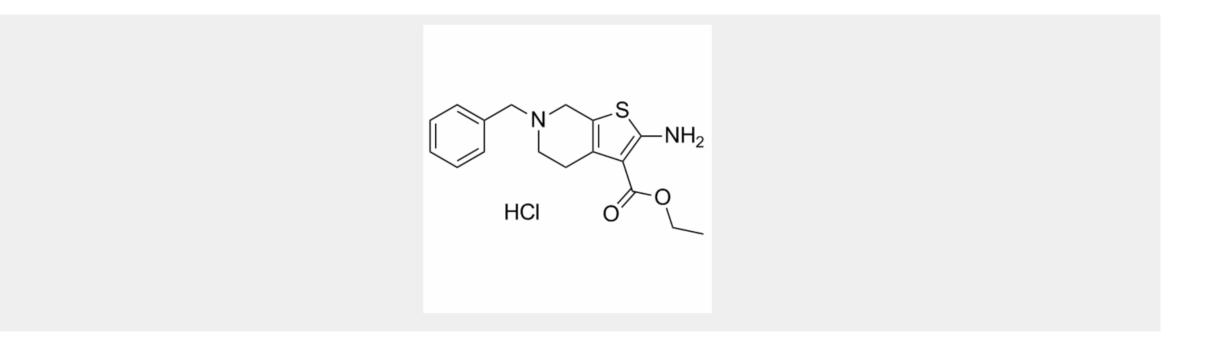


### **Product Description**

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<sup>2+</sup>, 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<sup>2+</sup>, but its oxidation is slow in the absence of Fe<sup>2+</sup> and almost completely inhibited by catalase. Tinoridine is also oxidized by H<sub>2</sub>O<sub>2</sub>-Fe<sup>2+</sup> system producing OH (Fenton reaction), but it does not affect the reduction of cytochrome c caused by superoxide radical<sup>[1]</sup>.

*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<sup>[2]</sup>.



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