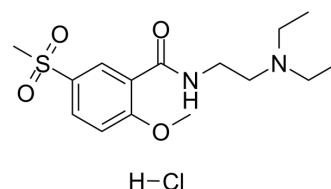


## Tiapride hydrochloride

|                           |  |
|---------------------------|--|
| <b>Cat. No.:</b>          | HY-B1196   |
| <b>CAS No.:</b>           | 51012-33-0   |
| <b>Molecular Formula:</b> | C <sub>15</sub> H <sub>25</sub> ClN <sub>2</sub> O <sub>4</sub> S  |
| <b>Molecular Weight:</b>  | 365  |
| <b>Target:</b>            | Dopamine Receptor  |
| <b>Pathway:</b>           | GPCR/G Protein; Neuronal Signaling   |
| <b>Storage:</b>           | 4°C, sealed storage, away from moisture and light<br>* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light) |



### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : ≥ 200 mg/mL (547.95 mM)  
 DMSO : 31.25 mg/mL (85.62 mM; Need ultrasonic)  
 \* "≥" means soluble, but saturation unknown.

| Preparing Stock Solutions | Solvent Concentration | Mass      |            |            |
|---------------------------|-----------------------|-----------|------------|------------|
|                           |                       | 1 mg      | 5 mg       | 10 mg      |
|                           | 1 mM                  | 2.7397 mL | 13.6986 mL | 27.3973 mL |
|                           | 5 mM                  | 0.5479 mL | 2.7397 mL  | 5.4795 mL  |
|                           | 10 mM                 | 0.2740 mL | 1.3699 mL  | 2.7397 mL  |

Please refer to the solubility information to select the appropriate solvent.

#### In Vivo

- Add each solvent one by one: PBS  
Solubility: 100 mg/mL (273.97 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 0.62 mg/mL (1.70 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 0.62 mg/mL (1.70 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 0.62 mg/mL (1.70 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Tiapride hydrochloride is a selective and orally active D<sub>2</sub> and D<sub>3</sub> dopamine receptors antagonist with IC<sub>50</sub> values of 110-320 nM and 180 nM, respectively. Tiapride hydrochloride shows anti-dyskinetic activity and anxiolytic activity. Tiapride hydrochloride is a neuroleptic agent<sup>[1][2]</sup>.

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|                                     |   |   |
|-------------------------------------|---|---|
| <b>IC<sub>50</sub> &amp; Target</b> | D <sub>2</sub> Receptor<br>110-320 nM (IC <sub>50</sub> ) | D <sub>3</sub> Receptor<br>180 nM (IC <sub>50</sub> ) |
|-------------------------------------|---|---|

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## REFERENCES

- [1]. Scatton B, et al. The preclinical pharmacologic profile of tiapride. *Eur Psychiatry*. 2001 Jan;16 Suppl 1:29s-34s.
- [2]. Peters DH, et al. Tiapride. A review of its pharmacology and therapeutic potential in the management of alcohol dependence syndrome. *Drugs*. 1994 Jun;47(6):1010-32.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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