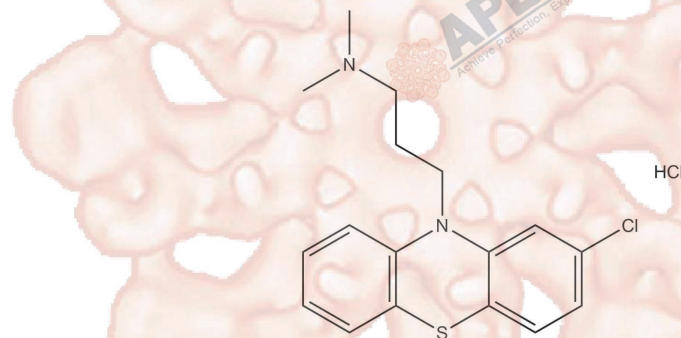


## Chlorpromazine HCl

<b>Cat. No.:</b>	B1480
<b>CAS No.:</b>	69-09-0
<b>Formula:</b>	C <sub>17</sub> H <sub>19</sub> ClN <sub>2</sub> S·HCl
<b>M.Wt:</b>	355.33
<b>Synonyms:</b>	
<b>Target:</b>	Neuroscience
<b>Pathway:</b>	Dopamine Receptor
<b>Storage:</b>	Store at -20°C



### Solvent & Solubility

≥ 17.8 mg/mL in DMSO, ≥ 74.8 mg/mL in EtOH, ≥ 71.4 mg/mL in H<sub>2</sub>O

In Vitro

Preparing Stock Solutions	Solvent Concentration	Mass		
		1mg	5mg	10mg
	1 mM	2.8143 mL	14.0714 mL	28.1429 mL
	5 mM	0.5629 mL	2.8143 mL	5.6286 mL
	10 mM	0.2814 mL	1.4071 mL	2.8143 mL

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

### Biological Activity

Shortsummary

dopamine receptor antagonist

IC<sub>50</sub> & Target

In Vitro

#### Cell Viability Assay

Cell Line:	Hippocampus neurons
Preparation method:	The solubility of this compound in DMSO is > 10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20 °C for several months.
Reacting conditions:	10 ~ 100 μM
Applications:	Chlorpromazine HCl at 10 ~ 100 μM dose-dependently decreased mIPSC

amplitude. Besides, Chlorpromazine HCl significantly accelerated the decay of mIPSC at the concentrations  $\geq 30 \mu\text{M}$  in a dose-dependent manner. However, there was no significant difference on the 10 ~ 90% rise time between the control group and the Chlorpromazine HCl treatment groups.

#### Animal experiment

Animal models: A rat model of hypoxia

Dosage form: 30 mg/kg; i.p.

Applications: In a rat model of hypoxia, Chlorpromazine HCl reduced irreversible loss of synaptic transmission in brain tissues. Chlorpromazine HCl also significantly delayed the occurrence of the hypoxia-induced spreading depression in rats by slowing down the influx of  $\text{Ca}^{2+}$  into neurons.

Other notes: Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

In Vivo

## Product Citations

See more customer validations on [www.apexbt.com](http://www.apexbt.com).

## References

- [1]. Mozrzymas JW, Barberis A, Michalak K, Cherubini E. Chlorpromazine inhibits miniature GABAergic currents by reducing the binding and by increasing the unbinding rate of GABAA receptors. *J Neurosci.* 1999 Apr 1;19(7):2474-88.
- [2]. Balestrino M, Somjen GG. Chlorpromazine protects brain tissue in hypoxia by delaying spreading depression-mediated calcium influx. *Brain Res.* 1986 Oct 22;385(2):219-26.

## Caution

**FOR RESEARCH PURPOSES ONLY.**

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

*Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.*

# APExBIO Technology

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