

## Product Data Sheet

Product Name: Octoclothepine

Cat. No.: GC79314

### Chemical Properties

Cas. No. 13448-22-1

Formula  $C_{19}H_{21}ClN_2S$

M.Wt 344.9

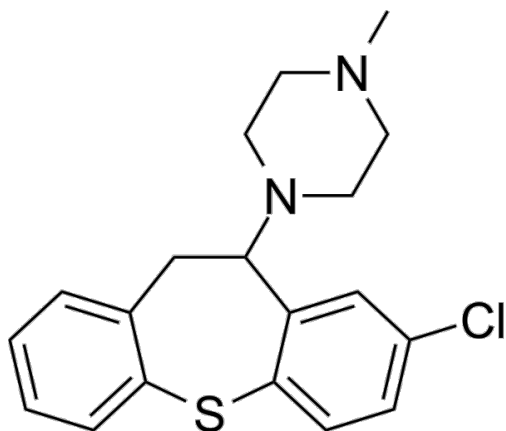
Solubility DMSO: 10 mg/mL (28.99 mM);  
ultrasonic and warming and heat to  
60°C)

Storage Store at 4°C, away from moisture  
and light

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



### Background

Octoclothepine (Clorotepine) is a D<sub>2</sub> dopamine receptor antagonist and 5-HT<sub>2</sub> serotonin receptor antagonist, with K<sub>i</sub> values of 0.67 nM, 0.57 nM, and 0.19 nM for the dopamine D<sub>2</sub>, 5-HT<sub>2A</sub>, and 5-HT<sub>2C</sub> receptors, respectively. Octoclothepine also binds to adrenergic receptors, with K<sub>i</sub> values of 0.66 nM, 0.56 nM, and 0.77 nM for α<sub>1a</sub>, α<sub>1b</sub>, and α<sub>1d</sub>, respectively. Octoclothepine can be used in schizophrenia research [1].

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

## Product Data Sheet

---

In Vitro, Octoclothepein (Compound 8) binds with subnanomolar to nanomolar affinity to bovine  $\alpha 1a$ -, hamster  $\alpha 1b$ -, rat  $\alpha 1d$ -adrenoceptors, human D2, human 5-HT2A, and human 5-HT2C receptors,, with  $K_i$  values of 0.66 nM, 0.56 nM, 0.77 nM, 0.67 nM, 0.57 nM, and 0.19 nM, respectively<sup>[1]</sup>.

### References:

[1]. Helia O, et al. Reduction of octoclothepeine-N-oxide by rat liver microsomes. Eur J Drug Metab Pharmacokinet. 1981;6(2):155-8.

[2]. Roth BL, et al. Binding of typical and atypical antipsychotic agents to 5-hydroxytryptamine-6 and 5-hydroxytryptamine-7 receptors. J Pharmacol Exp Ther. 1994 Mar;268(3):1403-10.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA