

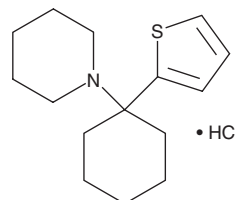
PRODUCT INFORMATION



Tenocyclidine (hydrochloride)

Item No. 17014

CAS Registry No.: 1867-65-8
Formal Name: 1-[1-(2-thienyl)cyclohexyl]-piperidine, monohydrochloride
Synonym: TCP
MF: $C_{15}H_{23}NS \cdot HCl$
FW: 285.9
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 235 nm
Supplied as: A crystalline solid
Storage: $-20^{\circ}C$
Stability: ≥ 5 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Description

Tenocyclidine (TCP), known more formally as N-[1-(2-thienyl)cyclohexyl] piperidine, is an analog of phencyclidine (PCP) in which the phenyl substituent is replaced with a thiophene group. TCP is a potent antagonist of the NMDA receptor-gated ion channel ($K_d = 9$ nM).¹ TCP blocks NMDA-activated excitatory postsynaptic potential in brain more potently than PCP.² PCP and many analogs, including TCP, block the uptake and enhance the release of dopamine both *in vitro* and *in vivo*.³ TCP is regulated as a Schedule I compound in the United States. This product is intended for forensic and research applications.

References

1. Yeh, G.C., Bonhaus, D.W., Nadler, J.V., *et al.* N-methyl-D-aspartate receptor plasticity in kindling: Quantitative and qualitative alterations in the N-methyl-D-aspartate receptor-channel complex. *Proc. Natl. Acad. Sci. USA* **86**(20), 8157-8160 (1989).
2. Bartschat, D.K. and Blaustein, M.P. Phencyclidine in low doses selectively blocks a presynaptic voltage-regulated potassium channel in rat brain. *Proc. Natl. Acad. Sci. USA* **83**(1), 189-192 (1986).
3. Chaudieu, I., Vignon, J., Chicheportiche, M., *et al.* Role of the aromatic group in the inhibition of phencyclidine binding and dopamine uptake by PCP analogs. *Pharmacol. Biochem. Behav.* **32**(3), 699-705 (1989).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 07/05/2023

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM