# PRODUCT INFORMATION

## Benocyclidine-$d_{10}$

*Item No. 9001493*

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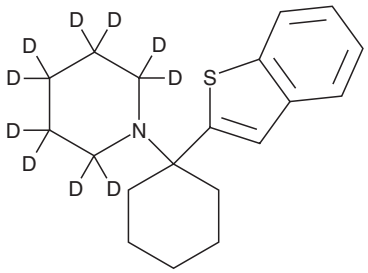
|---|---|
| **Formal Name:** | 1-(1-benzo[b]thien-2-ylcyclohexyl)-2,2,3,3,4,4,5,5,6,6-$d_{10}$-piperidine |
| **Synonyms:** | BCP-$d_{10}$, Benzothiophenylcyclohexylpiperidine-$d_{10}$, BTCP-$d_{10}$, GK 13-$d_{10}$ |
| **MF:** | $C_{19}H_{15}D_{10}NS$ |
| **FW:** | 309.5 |
| **Chemical Purity:** | ≥98% (Benocyclidine) |
| **Deuterium Incorporation:** | ≥99% deuterated forms ($d_1$-$d_{10}$); ≤1% $d_0$ |
| **UV/Vis.:** | $\lambda_{max}$: 229, 270, 300 nm |
| **Supplied as:** | A crystalline solid |
| **Storage:** | -20°C |
| **Stability:** | ≥5 years |




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

## Description

BCP (Item No. 11737) is a derivative of phencyclidine with a benzothiophenyl group instead of a phenyl ring. It acts as a potent and selective dopamine reuptake inhibitor ($IC_{50}$ = 8 nM) with negligible affinity for the NMDA receptor-linked phencyclidine receptor ($K_{0.5}$ = 6 µM).[1-2] BCP has been used to label the dopamine transporter in the mouse brain.[3] This product is intended for forensic and research applications.

## References


1. Vignon, J., Pinet, V., Cerruti, C., *et al.* [$^3$H]N-[1-(2-benzo(b)thiophenyl)cyclohexyl]piperidine ([$^3$H]BTCP): A new phencyclidine analog selective for the dopamine uptake complex. *Eur. J. Pharmacol.* **148(3)**, 427-436 (1988).
2. 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).
3. Maurice, T., Vignon, J., Kamenka, J.-M., *et al. In vivo* labelling of the mouse dopamine uptake complex with the phencyclidine derivative [$^3$H]BTCP. *Neurosci. Lett.* **101(2)**, 234-238 (1989).





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