PRODUCT INFORMATION



PD 168568 (hydrochloride)

Item No. 35483

CAS Registry No.: 1782532-06-2

Formal Name: 3-[2-[4-(3,4-dimethylphenyl)-1-

> piperazinyl]ethyl]-2,3-dihydro-1Hisoindol-1-one, dihydrochloride

MF: C₂₂H₂₇N₃O • 2HCl

FW: 422.4 **Purity:** ≥98% Supplied as: A solid Storage: -20°C Stability: ≥4 years

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

Laboratory Procedures

PD 168568 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the PD 168568 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. PD 168568 (hydrochloride) is soluble in organic solvents such as DMSO. It is also soluble in water. The solubility of PD 168568 (hydrochloride) in DMSO and water is approximately 100 and 50 mM, respectively. We do not recommend storing the aqueous solution for more than one day.

Description

PD 168568 is a dopamine D_4 receptor antagonist ($K_i = 8.8 \text{ nM}$). It is selective for dopamine D_4 over D_2 receptors (K, = 1,842 nM). PD 168568 (3 mg/kg) reverses amphetamine-induced hyperlocomotion in rats. It also inhibits the growth of glioblastoma neural stem cells when used at concentrations of 25 and 50 μ M.²

References

- 1. Belliotti, T.R., Brink, W.A., Kesten, S.R., et al. Isoindolinone enantiomers having affinity for the dopamine D₄ receptor. Bioorg. Med. Chem. Lett. **8(12)**, 1499-1502 (1998).
- 2. Dolma, S., Selvadurai, H.J., Lan, X., et al. Inhibition of dopamine receptor D4 impedes autophagic flux, proliferation, and survival of glioblastoma stem cells. Cancer Cell 29(6), 859-873 (2016).

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

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.

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