

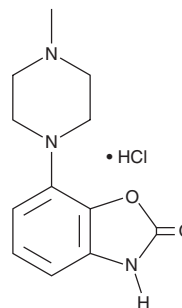
PRODUCT INFORMATION



Pardoprinox (hydrochloride)

Item No. 23456

CAS Registry No.: 269718-83-4
Formal Name: 7-(4-methyl-1-piperazinyl)-2(3H)-benzoxazolone, monohydrochloride
Synonyms: DU-126891, SLV 308
MF: $C_{12}H_{15}N_3O_2 \cdot HCl$
FW: 269.7
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 219 nm
Supplied as: A crystalline solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



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

Laboratory Procedures

Pardoprinox (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the pardoprinox (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Pardoprinox (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of pardoprinox (hydrochloride) in these solvents is approximately 0.1, 5, and 1 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of pardoprinox (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of pardoprinox (hydrochloride) in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Pardoprinox is a partial agonist of dopamine D_2 and D_3 receptors ($EC_{50}s = 10$ and 0.63 nM, respectively) and a full agonist of the serotonin (5-HT) receptor subtype 5-HT $_{1A}$ ($EC_{50} = 501$ nM) in radioligand binding assays.¹ It is selective for dopamine D_2 and D_3 and 5-HT $_{1A}$ receptors over a panel of neurotransmitter receptors ($K_s = >1,000$ nM). Pardoprinox reduces the accumulation of cAMP induced by forskolin (Item No. 11018) in a concentration-dependent manner and blocks quinpirole-induced inhibition of dopamine release ($pA_2 = 8.5$) in rat striatal slices. Pardoprinox increases contralateral turning behavior in a 6-OHDA rat model of Parkinson's disease ($ED_{50} = 0.03$ mg/kg).² It also reduces hyperlocomotion induced by amphetamine (Item Nos. 14204 | ISO60188) and induces 5-HT $_{1A}$ -mediated flat body posturing and lower lip retraction in rats. Pardoprinox (0.01-0.3 mg/kg) increases locomotor activity in a marmoset model of Parkinson's disease induced by MPTP in a dose-dependent manner. Formulations containing pardoprinox are under clinical investigation for the treatment of Parkinson's disease-associated motor fluctuations.³

References

1. Glennon, J.C., Van Scharrenburg, G., Ronken, E., *et al.* *Synapse* **60**(8), 599-608 (2006).
2. Jones, C.A., Johnston, L.C., Jackson, M.J., *et al.* *Eur. Neuropsychopharmacol.* **20**(8), 582-593 (2010).
3. Rascol, O., Brozova, J., Hauser, R.A., *et al.* *Parkinsonism Relat. Disord.* **18**(4), 370-376 (2012).

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.

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