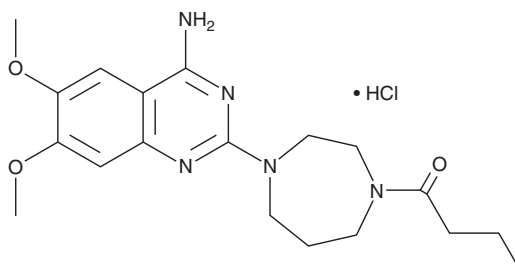


PRODUCT INFORMATION

Bunazosin (hydrochloride)

Item No. 45574

CAS Registry No.: 52712-76-2
Formal Name: 1-[4-(4-amino-6,7-dimethoxy-2-quinazolinyl)hexahydro-1H-1,4-diazepin-1-yl]-1-butanone, monohydrochloride
Synonyms: DDQ, E-643
MF: C₁₉H₂₇N₅O₃ • HCl
FW: 409.9
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

Bunazosin (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the bunazosin (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Bunazosin (hydrochloride) is slightly soluble (0.1-1 mg/ml) in DMSO.

Description

Bunazosin is an antagonist of the α_1 -adrenergic receptor (α_1 -AR; $K_d = 0.59$ nM).¹ It reduces glutamate-induced decreases in viability in primary rat retinal cells when used at concentrations of 1 and 10 μ M.² Ocular instillation of bunazosin (0.01%) prevents phenylephrine- or endothelin-1-induced constriction of retinal arteries in rabbits. It also prevents reductions in refractive error and increases in axial elongation in a mouse model of lens-induced myopia.³ Formulations containing bunazosin have been used in the treatment of glaucoma and ocular hypertension.

References

1. Hata, F., Kondo, E., Kondo, S., *et al.* Characteristics of [³H]E-643-binding to alpha adrenoceptors. *Japan J. Pharmacol.* **32**(1), 181-187 (1982).
2. Hara, H., Ichikawa, M., Oku, H., *et al.* Bunazosin, a selective α_1 -adrenoceptor antagonist, as an anti-glaucoma drug: Effects on ocular circulation and retinal neuronal damage. *Cardiovasc. Res.* **23**(1), 43-56 (2005).
3. Jeong, H., Lee, D., Jiang, X., *et al.* Topical application of bunazosin hydrochloride suppresses myopia progression with an increase in choroidal blood perfusion. *Invest. Ophthalmol. Vis. Sci.* **64**(14), 15 (2023).

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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