

Brimonidine Tartrate

Chemical Properties

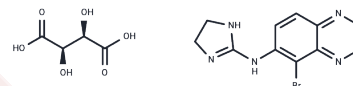
CAS No. : 70359-46-5

Formula: C₁₅H₁₆BrN₅O₆

Molecular Weight: 442.22

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	Brimonidine Tartrate (AGN190342 tartrate) is a quinoxaline derivative and adrenergic α -2 receptor agonist (EC ₅₀ : 0.45 nM) that is used to manage intraocular pressure associated with open-angle glaucoma or ocular hypertension.
Targets(IC ₅₀)	Adrenergic Receptor
In vitro	Brimonidine (0.5/1 mg/kg) reduced progressive ganglion cell loss (26%/15%). At elevated intraocular pressure, the use of Brimonidine significantly protected retinal ganglion cells and prevented further cell loss. Brimonidine injection into the eyes of SD rats increased the number of brain-derived neurotrophic factor-positive retinal ganglion cells from 55% to 166%. Brimonidine prevented further ganglion cell loss after 10 days of elevated IOP. Brimonidine increased immunoreactivity for glial fibrillary acidic protein in the hypertensive retina of attenuated eyes.
In vivo	Brimonidine (0.5/1 mg/kg) reduced progressive ganglion cell loss (26%/15%). At elevated intraocular pressure, the use of Brimonidine significantly protected retinal ganglion cells and prevented further cell loss. Brimonidine injection into the eyes of SD rats increased the number of brain-derived neurotrophic factor-positive retinal ganglion cells from 55% to 166%. Brimonidine prevented further ganglion cell loss after 10 days of elevated IOP. Brimonidine increased immunoreactivity for glial fibrillary acidic protein in the hypertensive retina of attenuated eyes.

Solubility Information

Solubility	DMSO: 16.67 mg/mL (37.69 mM), Sonication is recommended. H ₂ O: 56.53 mM, Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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A DRUG SCREENING EXPERT

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2613 mL	11.3066 mL	22.6132 mL
5 mM	0.4523 mL	2.2613 mL	4.5226 mL
10 mM	0.2261 mL	1.1307 mL	2.2613 mL
50 mM	0.0452 mL	0.2261 mL	0.4523 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

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