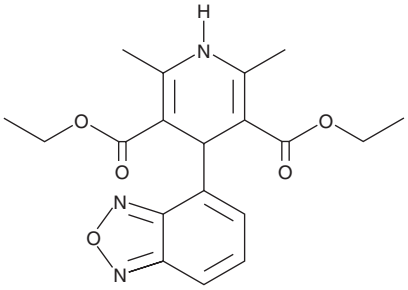
PRODUCT INFORMATION

Darodipine

Item No. 41667



CAS Registry No.:	72803-02-2
Formal Name:	4-(2,1,3-benzoxadiazol-4-yl)-1,4-dihydro-2,6-dimethyl-3,5-pyridinedicarboxylic acid, 3,5-diethyl ester
Synonym:	PY 108-068
MF:	$C_{19}H_{21}N_3O_5$
FW:	371.4
Purity:	≥95%
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

Darodipine is supplied as a solid. A stock solution may be made by dissolving the darodipine in the solvent of choice, which should be purged with an inert gas. Darodipine is sparingly soluble (1-10 mg/ml) in DMSO and slightly soluble (0.1-1 mg/ml) in acetonitrile.

Description

Darodipine is a calcium channel inhibitor.[1] It selectively inhibits calcium-induced contractions of isolated rabbit aorta (pD_2 = 8.8) over norepinephrine-, serotonin-, or angiotensin II-induced contractions at 10 µM. *In vivo*, continuous infusion of darodipine (2 µg/kg per minute) increases cerebral tissue oxygenation in a cat model of focal ischemia induced by cerebral artery occlusion (CAO).[2] Darodipine (5 mg/kg) reduces mean arterial blood pressure and increases arterial luminal area in spontaneously hypertensive rats (SHRs).[3]

References

1. Hof, R.P., Vuorela, H.J., and Neumann, P. PY 108-068, a new, potent, and selective inhibitor of calcium-induced contraction of rabbit aortic rings. *J. Cardiovasc. Pharmacol.* **4(3)**, 344-351 (1982).
2. Wiernsperger, N., Gygax, P., and Hofmann, A. Calcium antagonist PY 108-068: Demonstration of its efficacy in various types of experimental brain ischemia. *Stroke* **15(4)**, 679-685 (1984).
3. Ferrante, F., Ricci, A., Rossodivita, I., *et al.* Influence of treatment with the calcium channel blocker darodipine (PY 108-068) on the morphology of pial and coronary arteries in spontaneously hypertensive rats. *Clin. Exp. Hypertens.* **16(3)**, 341-357 (1994).

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