# **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  $\mu$ M. 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).<sup>2</sup> Darodipine (5 mg/kg) reduces mean arterial blood pressure and increases arterial luminal area in spontaneously hypertensive rats (SHRs).<sup>3</sup>

#### References

- 1. Hof, R.P., Vuorela, H.J., and Neumann, P. PY 108-068, a new, potent, and selective inhibitor of calciuminduced 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).
- 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).

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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