

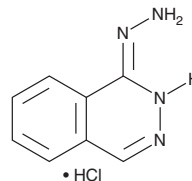
PRODUCT INFORMATION



Hydralazine (hydrochloride)

Item No. 23121

CAS Registry No.: 304-20-1
Formal Name: 1-hydrazinyl-phthalazine, monohydrochloride
Synonym: 1-Hydrazinophthalazine
MF: C₈H₈N₄ • HCl
FW: 196.6
Purity: ≥98%
UV/Vis.: λ_{max}: 211, 236 nm
Supplied as: A crystalline 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

Hydralazine (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the hydralazine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Hydralazine (hydrochloride) is slightly soluble in ethanol and methanol. Hydralazine (hydrochloride) is also soluble in water. We do not recommend storing the aqueous solution for more than one day.

Description

Hydralazine is an orally bioavailable vasodilator and antihypertensive agent.¹ It decreases DNA methylation in Jurkat cells at a concentration of 10 μM and inhibits extracellular and intracellular production of reactive oxygen species (ROS) in rat macrophages activated by phorbol 12-myristate 13-acetate (PMA; Item No. 10008014) at a concentration of 100 μM.^{2,3} Hydralazine (100 μM) also decreases nitric oxide production and mRNA expression of inducible nitric oxide synthase (iNOS) in rat macrophages activated by LPS (Item Nos. 19660 | 19661) and interferon-γ (IFN-γ).³ It reduces contraction of rat aortic arterial strips induced by potassium and norepinephrine (Item No. 16673; IC₅₀s = 2.2 and 3.06 mM, respectively).⁴ Hydralazine (2.6 mg/kg) lowers mean arterial blood pressure (MAP) by 41.76% in conscious rats.⁵ Formulations containing hydralazine have been used in the treatment of high blood pressure and heart failure.

References

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3. Leiro, J.M., Alvarez, E., Arranz, J.A., et al. Antioxidant activity and inhibitory effects of hydralazine on inducible NOS/COX-2 gene and protein expression in rat peritoneal macrophages. *Int. Immunopharmacol.* **4**(2), 163-177 (2004).
4. Orallo, F., Gil-Longo, J., Bardán, B., et al. Comparison of the effects of hydralazine and nifedipine on contractions and 45Ca influx of rat aorta. *J. Pharm. Pharmacol.* **43**(5), 356-359 (1991).
5. Siddiqui, A.A., Mishra, R., Shaharyar, M., et al. Triazole incorporated pyridazinones as a new class of antihypertensive agents: Design, synthesis and in vivo screening. *Bioorg. Med. Chem. Lett.* **21**(3), 1023-1026 (2011).

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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