

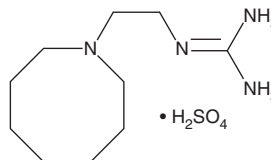
PRODUCT INFORMATION



Guanethidine (sulfate)

Item No. 16217

CAS Registry No.: 645-43-2
Formal Name: N-[2-(hexahydro-1(2H)-azocinyl)ethyl]-guanidine, monosulfate
MF: C₁₀H₂₂N₄ • H₂SO₄
FW: 296.4
Purity: ≥95%
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

Guanethidine (sulfate) is supplied as a crystalline solid. Aqueous solutions of guanethidine (sulfate) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of guanethidine (sulfate) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Guanethidine is an antihypertensive compound that competes with norepinephrine for transport into presynaptic terminals of adrenergic neurons by the norepinephrine transporter.¹ Once guanethidine has entered the nerve, it becomes concentrated in synaptic vesicles, depleting endogenous norepinephrine, and thus, reducing the release of norepinephrine in response to action potentials.¹ Guanethidine's actions are restricted to peripheral nerve terminals because its basic guanidine group does not allow passage through the blood brain barrier.¹ Its use has been explored in the relief of chronic pain caused by complex regional pain syndrome.²

References

1. Gerber, J.G., Freed, C.R., and Nies, A.S. Antihypertensive pharmacology. *West. J. Med.* **132(5)**, 430-439 (1980).
2. Livingstone, J.A. and Atkins, R.M. Intravenous regional guanethidine blockade in the treatment of post-traumatic complex regional pain syndrome type 1 (algodystrophy) of the hand. *J. Bone Joint Surg. Br.* **84(3)**, 380-386 (2002).

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.

WARRANTY AND LIMITATION OF REMEDY

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