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Product Information

Xylazine hydrochloride

Product Number **X 1251**
Storage Temperature -0 °C

Product Description

Molecular Formula: $C_{12}H_{16}N_2S \cdot HCl$
Molecular Weight: 256.8
CAS Number: 23076-35-9
Melting Point: 166-167 °C

Xylazine hydrochloride is an α_2 -adrenergic receptor agonist, sedative, and muscle relaxant. A solution of ketamine hydrochloride and xylazine hydrochloride (Product No. K 113) has been used together to produce rapid and reversible anesthesia in experimental animals.¹ Xylazine elicited a diuretic response in ketamine-anesthetized animals, probably through activation of complex peripheral and CNS α_2 -adrenergic receptor systems.² Xylazine hydrochloride did not discriminate among the four known α_2 -adrenergic receptor subtypes (A<B<C and D) in membranes of particular tissues.³

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

Xylazine hydrochloride is soluble in water (greater than 175 mg/ml). A solution in water (50 mg/ml) is clear and colorless.

References

1. Soltesz, I., and Deschenes, M., Low- and High-Frequency Membrane Potential Oscillations During Theta Activity In CA1 And CA3 Pyramidal Neurons Of the Rat Hippocampus Under Ketamine-Xylazine Anesthesia. *J. Neurophysiol.*, **70(1)**, 97-116 (1993).
2. Cabral, A. D., et al., Central Alpha2-receptor Mechanisms Contribute To Enhanced Renal Responses During Ketamine-Xylazine Anesthesia. *Am. J. Physiol.*, **275(6 pt 2)**, R1867-R1874 (1998).
3. Schwartz, D. D., and Clark, T. P., Affinity of Detomidine, Medetomidine And Xylazine For Alpha-2 Adrenergic Receptor Subtypes. *J. Vet. Pharmacol. Ther.*, **21(2)**, 107-111 (1998).
4. Ware, T. D., and Paul, D., Cross-tolerance Between Analgesia Produced By Xylazine And Selective Opioid Receptor Subtype Treatments. *Eur. J. Pharmacol.*, **389(2-3)**, 181-185 (2000).

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