

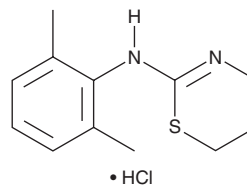
PRODUCT INFORMATION



Xylazine (hydrochloride)

Item No. 36692

CAS Registry No.: 23076-35-9
Formal Name: N-(2,6-dimethylphenyl)-5,6-dihydro-4H-1,3-thiazin-2-amine, monohydrochloride
Synonym: BAY-Va 1470
MF: C₁₂H₁₆N₂S • HCl
FW: 256.8
Purity: ≥98%
UV/Vis.: λ_{max}: 212 nm
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

Xylazine (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the xylazine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Xylazine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of xylazine (hydrochloride) in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of xylazine (hydrochloride) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of xylazine (hydrochloride) in PBS (pH 7.2) is approximately 50 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Xylazine is an agonist of α₂-adrenergic receptors (K_i = 194 nM).¹ It is an analog of clonidine, an α₂-adrenergic receptor agonist used to reduce blood pressure. Xylazine is used for sedation, anesthesia, and analgesia in non-human mammals.²⁻³ This product is also available as an analytical reference standard (Item Nos. 37854 | 22641).

References

1. Virtanen, R., Savola, J.M., Saano, V., *et al.* Characterization of the selectivity, specificity and potency of medetomidine as an α₂-adrenoceptor agonist. *Eur. J. Pharmacol.* **150(1-2)**, 9-14 (1988).
2. Richardson, C.A. and Flecknell, P.A. Anaesthesia and post-operative analgesia following experimental surgery in laboratory rodents: Are we making progress? *Altem. Lab. Anim.* **33(2)**, 119-127 (2005).
3. Vallverde, A. Alpha-2 agonists as pain therapy in horses. *Vet. Clin. North Am. Equine Pract.* **26(3)**, 515-532 (2010).

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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