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ProductInformation

Clonidine hydrochloride

Product Number **C 7897**
Storage Temperature 2-8 °C

Product Description

Molecular Formula: $C_9H_9Cl_2N_3 \bullet HCl$
Molecular Weight: 266.6
CAS Number: 4205-91-8
pK_a: 8.2[1]

Clonidine is an α_2-adrenergic agonist that has been used clinically as an antihypertensive[3] and an analgesic.[4] It is an inhibitor of gastrointestinal motility that blocks α_2 sites, which leads to an adrenergic response.[2] Clonidine reduces sympathetic stimulation, which leads to lowering of blood pressure and a slowing of heart rate.[5] It has been generally proposed that clonidine and related antihypertensives act through a group of receptors called the imidazoline receptors.[3,6,7,8]

Precautions and Disclaimer

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

Preparation Instructions

Clonidine hydrochloride is soluble in water (50 mg/ml), with heat as needed, yielding a clear to slightly hazy colorless solution. A solution of 50 mg/ml clonidine in water has a pH of 4.0-5.0. It is also soluble in dehydrated alcohol and slightly soluble in chloroform.[7]

Storage/Stability

Solutions of clonidine may be sterilized by autoclaving.

Clonidine should be stored protected from light and in airtight containers.[6]

References

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4. Boyd, R. E., Alpha2-adrenergic Receptor Agonists as Analgesics. Curr. Top. Med. Chem., **1(3)**, 193-197 (2001).
5. Martindale The Extra Pharmacopoeia, 30th ed., Reynolds, J. E. F., ed., The Pharmaceutical Press (London, England: 1993), p. 348.
6. Eglen, R. M., et al., Seeing through a glass darkly: Casting Light on Imidazoline 'I' Sites. Trends Pharmacol. Sci., **19(9)**, 381-390 (1998).
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8. Khan, Z. P., et al., Alpha-2 and Imidazoline Receptor Agonists. Their Pharmacology and Therapeutic Role. Anaesthesia, **54(2)**,146-165 (1999).

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