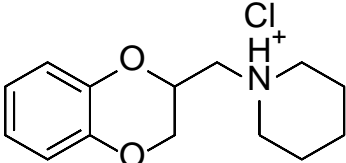


Product data sheet



MedKoo Cat#: 329521 Name: Piperoxan HCl CAS: 135-87-5 (HCl) Chemical Formula: C ₁₄ H ₂₀ ClNO ₂ Molecular Weight: 269.769		
Product supplied as:	Powder	
Purity (by HPLC):	≥ 98%	
Shipping conditions	Ambient temperature	
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.	

1. Product description:

Piperoxan, also known as benodaine, is a drug which was the very first antihistamine to be discovered. This compound, derived from benzodioxan, was prepared in the early 1930s by Daniel Bovet and Ernest Fourneau at the Pasteur Institute in France. Formerly investigated by Fourneau as an α -adrenergic-blocking agent, they demonstrated that it also antagonized histamine-induced bronchospasm in guinea pigs.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	31.0	114.91
Chloroform	30.0	111.21
PBS (pH 7.2)	10.0	37.07
Water	50.0	185.34

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	3.71 mL	18.53 mL	37.07 mL
5 mM	0.74 mL	3.71 mL	7.41 mL
10 mM	0.37 mL	1.85 mL	3.71 mL
50 mM	0.07 mL	0.37 mL	0.74 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of "Calculator"

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

TBD

In vivo study

- Compton DM, Dietrich KL, Smith JS. Influence of the alpha 2 noradrenergic antagonist piperoxane on longevity in the Fischer-344 rat: a preliminary report. Psychol Rep. 1995 Aug;77(1):139-42. doi: 10.2466/pr0.1995.77.1.139. PMID: 7501752.
- Vachette C, Debure L, Rousset C, Pujol JF, Renaud B. Relationship between tyrosine hydroxylase content and noradrenergic cell reactivity to piperoxane: an in vivo voltammetric approach in the rat locus coeruleus. Eur J Neurosci. 1994 Mar 1;6(3):364-73. doi: 10.1111/j.1460-9568.1994.tb00279.x. PMID: 7912615.

7. Bioactivity

Biological target:

Piperoxan (Benodaine) hydrochloride is an α_2 adrenoceptor antagonist.

Product data sheet



In vitro activity

TBD

In vivo activity

Piperoxane is an alpha 2-noradrenergic antagonist with demonstrated excitatory effects on neurons in the locus coeruleus, causing a corresponding increase in norepinephrine in many forebrain areas. 16 male Fischer-344 rats approximately 16 months of age were injected with 3 mg/kg of piperoxane or .09% saline. The piperoxane-treated rats lived an average of 127.1 days longer than the saline-treated rats. The results are discussed in terms of the effects of strategies designed to enhance brain levels of catecholamine and their effect on the aging process.

Reference: Psychol Rep. 1995 Aug;77(1):139-42. <https://pubmed.ncbi.nlm.nih.gov/7501752/>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.