

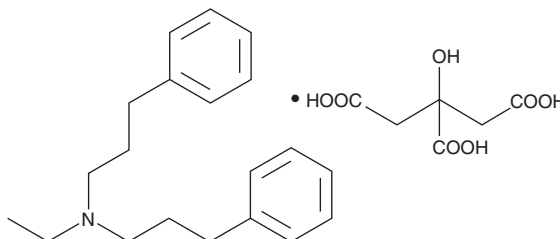
PRODUCT INFORMATION



Alverine (citrate)

Item No. 26892

CAS Registry No.: 5560-59-8
Formal Name: N-ethyl-N-(3-phenylpropyl)-benzenepropanamine, mono-2-hydroxy-1,2,3-propanetricarboxylate
Synonym: NSC 35459
MF: $C_{20}H_{27}N \cdot C_6H_8O_7$
FW: 473.6
Purity: $\geq 98\%$
Supplied as: A crystalline solid
Storage: 4°C
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

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

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 alverine (citrate) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of alverine (citrate) in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Alverine is an antispasmodic agent.¹ It suppresses contractions induced by potassium or acetylcholine (ACh), but increases spontaneous contractions, in isolated guinea pig detrusor smooth muscle. Alverine blocks spontaneous and vagal-stimulated colonic motility in rabbits.² Alverine (75 μ g/animal) reduces the number of abdominal contractions induced by 5-hydroxy-L-tryptophan (5-HTP; Item No. 20539) or high volume (1.6 ml) rectal distension in rats.³ Formulations containing alverine have been used in the treatment of functional gut disorders.

References

- Hayase, M., Hashitani, H., Suzuki, H., *et al.* Evolving mechanisms of action of alverine citrate on phasic smooth muscles. *Br. J. Pharmacol.* **152(8)**, 1228-1238 (2007).
- Bouvier, M., Grimaud, J.C., Abysique, A., *et al.* Effects of alverine on the spontaneous electrical activity and nervous control of the proximal colon of the rabbit. *Gastroenterol. Clin. Biol.* **16(4)**, 334-338 (1992).
- Coelho, A.-M., Jacob, L., Fioramonti, J., *et al.* Rectal antinociceptive properties of alverine citrate are linked to antagonism at the 5-HT_{1A} receptor subtype. *J. Pharm. Pharmacol.* **53(10)**, 1419-1426 (2001).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/26/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM