

Alverine (citrate)

Catalog No: tcsc2694



Available Sizes

Size: 5g

Size: 10g



Specifications

CAS No:

5560-59-8

Formula:

$C_{26}H_{35}NO_7$

Pathway:

Neuronal Signaling;GPCR/G Protein

Target:

5-HT Receptor;5-HT Receptor

Purity / Grade:

>98%

Solubility:

DMSO : 22 mg/mL (46.46 mM; Need ultrasonic and warming)

Alternative Names:

NSC 35459

Observed Molecular Weight:

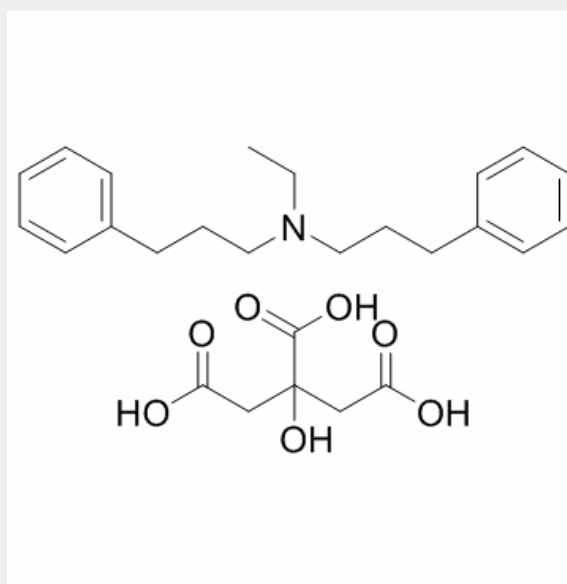
473.56

Product Description

Alverine citrate is a **5-HT_{1A}** receptor antagonist, with an **IC₅₀** of 101 nM.

IC50 & Target: IC50: 101 nM (5-HT_{1A})^[1].

In Vitro: Alverine is a drug used for functional gastrointestinal disorders. Alverine acts directly on the muscle in the gut, causing it to relax. Alverine Citrate (20 mg/kg) suppresses the effect of 5-HTP, but not that of 8-OH-DPAT. However, when injected intracerebroventricularly (75 µg/rat) alverine citrate reduces 8-OH-DPAT-induced enhancement of rectal distension-induced abdominal contractions. In-vitro binding studies reveal that Alverine citrate has a high affinity for 5-HT_{1A} receptors and a weak affinity for 5-HT₃ and 5-HT₄ subtypes^[1]. Alverine may increase Ca influx during action potentials due to inhibition of the inactivation of L-type Ca channels, but may also suppress evoked activity by inhibiting the sensitivity of contractile proteins to Ca²⁺^[2].



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