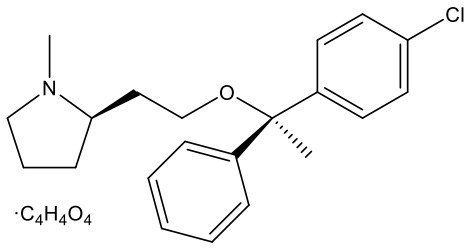
Catalog # 10-4644

Clemastine fumarate

CAS# 14976-57-9

(2R)-2-[2-[(1R)-1-(4-chlorophenyl)-1-phenylethoxy]ethyl]-1-methylpyrrolidine fumarate; Tavist

Lot # FBS3078



Histamine H1 antagonist with anti-muscarinic effects at the M1 receptor. Enhances remyelination in a mouse model of demyelination.[1] Displays protective role against neuroinflammation and demyelination via anti-inflammatory and anti-pyroptotic actions.[2] Clemastine promoted oligodendrocyte differentiation in a rat model of spinal cord injury *via* muscarinic receptor mediated activation of ERK1/2 signaling.[3]

1) Li *et al*. (2015), *Clemastine rescues behavioral changes and enhances remyelination in the cuprizone mouse model of demyelination*; Neurosci. Bull. **31** 617
2) Motawi *et al*. (2023), *Modulation of p38 MAPK and Nrf2/HO-1/NLRP3 inflammasome signaling and pyroptosis outline the anti-neuroinflammatory and remyelinating characters of Clemastine in EAE rat model*; Biochem. Pharmacol. **209** 115435
3) Tong *et al*. (2022), *Clemastine Promotes Differentiation of Oligodendrocyte Progenitor Cells Through the Activation of ERK1/2 via Muscarinic Receptors After Spinal Cord Injury*; Front. Pharmacol. **13** 914153

PHYSICAL DATA

Molecular Weight:	459.96
Molecular Formula:	$C_{21}H_{26}ClNO \cdot C_4H_4O_4$
Purity:	>98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (>25 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

Focus Biomolecules LLC 400 Davis Drive, Suite 600 Plymouth Meeting PA 19462

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