
Product Data Sheet

Product Name: Mofegiline hydrochloride

Cat. No.: GC36638

Chemical Properties

Cas. No. 120635-25-8

SMILES FC1=CC=C(CC/C(CN)=C(F)/[H])C=C1.[H]Cl

Formula $C_{11}H_{14}ClF_2N$ M.Wt 233.69

Solubility Water: ≥ 39 mg/mL (166.89 mM) Storage Store at $-20^{\circ}C$

General tips For obtaining a higher solubility, please warm the tube at $37^{\circ}C$ and shake it in the ultrasonic bath for a while. Stock solution can be stored below $-20^{\circ}C$ for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure

Background

Mofegiline is an inhibitor of monoamine oxidase B (MAO-B; $IC_{50} = 3.6$ nM for the rat brain mitochondrial enzyme).¹ It is selective for MAO-B over MAO-A ($IC_{50} = 680$ nM). Mofegiline also inhibits vascular adhesion protein-1 (VAP-1), also known as semicarbazide-sensitive amine oxidase (SSAO), an enzyme that has roles in leukocyte adhesion and transmigration, with an IC_{50} value of 20 nM for the human enzyme.² It reduces MPTP-induced decreases in striatal levels of dopamine, dihydroxyphenylacetic acid (DOPAC), and homovanillic acid (HVA) in mice when administered at a dose of 1.25 mg/kg.¹ Mofegiline (5 mg/kg) also inhibits LPS-induced increases in bronchoalveolar lavage fluid (BALF) levels of TNF- α in transgenic mice overexpressing VAP-1.

1.Zreika, M., Fozard, J.R., Dudley, M.W., et al. MDL 72,974: A potent and selective enzyme-activated irreversible inhibitor of monoamine oxidase type B with potential for use in Parkinson's disease. *J. Neural Transm. Park. Dis. Dement. Sect.* 1(4)243-254(1989)
2.Foot, J.S., Deodhar, M., Turner, C.I., et al. The discovery and development of selective 3-fluoro-4-aryloxyallylamine inhibitors of the amine oxidase activity of semicarbazide-sensitive amine oxidase/vascular adhesion protein-1 (SSAO/VAP-1). *Bioorg. Med. Chem.*

Caution: Product has not been fully validated for medical applications. For research use only.

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