

**Catalog # 10-2315**

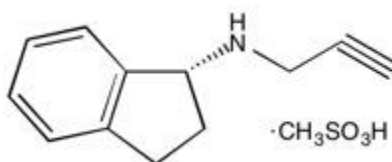
**Rasagiline mesylate**

CAS# 161735-79-1

TVP-1012; Azilect

(1R)-2,3-Dihydro-N-2-propynyl-1H-inden-1-amine methanesulfonate

Lot # X102629



Potent, irreversible monoamine oxidase (MAO) inhibitor selective for MAO-B (IC<sub>50</sub>=4.43 nM) over MAO-A (IC<sub>50</sub>=412 nM).<sup>1</sup> Parkinson's disease therapeutic.<sup>2</sup> Displays neuroprotective and neurorestorative properties in a Parkinson's disease zebrafish model.<sup>3</sup> Prevents  $\alpha$ -synuclein-induced dopaminergic neuronal death and rescues TrkB neurotrophic signaling.<sup>4</sup> Enhances BDNF levels and is neuroprotective in Parkinson's disease models.<sup>5</sup>

- 1) Youdim *et al.* (2001), *Rasagiline* [N-propargyl-1R(+)-aminoindan], a selective and potent inhibitor of mitochondrial monoamine oxidase B; *Br. J. Pharmacol.*, **132** 500
- 2) Cereda *et al.* (2017), *Efficacy of rasagiline and selegiline in Parkinson's disease: a head-to-head 3-year retrospective case-control study*; *J. Neurol.*, **264** 1254
- 3) Cronin and Grealy (2017), *Neuroprotective and Neuro-restorative Effects of Minocycline and Rasagiline in Zebrafish 6-Hydroxydopamine Model of Parkinson's Disease*; *Neuroscience*, **367** 34
- 4) Kang *et al.* (2017), *TrkB neurotrophic activities are blocked by  $\alpha$ -synuclein, triggering dopaminergic cell death in Parkinson's disease*; *Proc. Natl. Acad. Sci. USA*, **114** 10773
- 5) Ledreux *et al.* (2016), *BDNF levels are increased by aminoindan and rasagiline in a double lesion model of Parkinson's disease*; *Brain Res.*, **1631** 34

**PHYSICAL DATA**

Molecular Weight:	267.34
Molecular Formula:	C <sub>12</sub> H <sub>13</sub> N · CH <sub>3</sub> SO <sub>3</sub> H
Purity:	99% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 50 mg/ml), Water (up to 50 mg/ml) or Ethanol (up to 30 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO, distilled water or ethanol may be stored at -20°C for up to 1 month.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**