

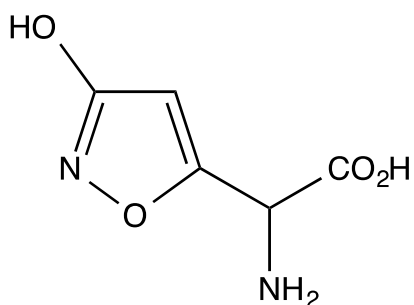
Catalog # 10-2693

(±)-Ibotenic acid hydrate

CAS# 60573-88-8

α-Amino-3-hydroxy-5-isoxazoleacetic acid hydrate

Lot # X101319



Ibotenic acid is a conformationally restricted analog of glutamate which occurs naturally in *Amanita muscaria* and related mushrooms. It is a non-specific glutamate receptor (both NMDA and mGluR) agonist.¹ May be used to induce hippocampal lesioning in rat neurodegeneration models.^{2,3} Induces lesions in the subiculum in a mouse model of Alzheimer's disease.⁴

- 1) Nakanishi (1992), *Molecular diversity of glutamate receptors and implications for brain function*; Science **258** 597
- 2) Jarrard (1989), *On the use of ibotenic acid to lesion selectively different components of the hippocampal formation*; J.Neurosci.Methods **29** 251
- 3) Isacson and Peschanski (1992), *Is there capacity for anatomical and functional repair in the adult somatosensory thalamus?*; Exp.Neurol. **115** 173
- 4) George et al. (2014), *Lesion of the subiculum reduces the spread of amyloid beta pathology to interconnected brain regions in a mouse model of Alzheimer's disease*; Acta Neuropathol.Commun. **2** 17

PHYSICAL DATA

Molecular Weight:	176.13
Molecular Formula:	C ₅ H ₆ N ₂ O ₄ ·H ₂ O
Purity:	>98% TLC
	NMR: (Conforms)
Solubility:	Water (1 mg/mL)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in water may be stored at -20°C for up to 1 month.

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