Product overview

Name: Ibotenic acid
Cat No: HB0330
Short description: Non-selective NMDA / mGlu receptor agonist

Biological description: Non-selective NMDA and mGlu receptor agonist (EC50 values are 17, 43, 110, >1000 and >1000 μM for mGlu5a, mGlu1a, mGlu2, mGlu4a and mGlu6 receptors respectively). Shows excitotoxic actions. Used for cognitive dysfunction models for neurodegenerative disease research.

Biological action: Agonist
Purity: >98%

Properties

Chemical name: α-Amino-(3-hydroxy-5-isoxazolyl)acetic acid
Molecular Weight: 158.11

Chemical structure:

![Chemical structure](image)

Molecular Formula: C5H6N2O4
CAS Number: 2552-55-8
PubChem identifier: 1233
SMILES: C1=C(ONC1=O)C(C(=O)O)N
Source: Synthetic

InChi: InChI=1S/C5H6N2O4/c6-4(5(9)10)2-1-3(8)7-11-2/h1,4H,6H2,(H,7,8)(H,9,10)
InChIKey: IRJCBFDCFXCWGO-UHFFFAOYSA-N
MDL number: MFCD00069294
Appearance: White solid

Storing and Using Your Product

Storage instructions: -20°C (desiccate)
Solubility overview: Soluble in water (10mM) and in 0.1M NaOH (100mM)
Important: This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

References for Ibotenic acid
Ibotenic acid and thioibotenic acid: a remarkable difference in activity at group III metabotropic glutamate receptors.
PubMedID: 14985045

Neurochemical and behavioral effects of the intrahippocampal co-injection of beta-amyloid protein1-40 and ibotenic acid in rats.
PubMedID: 15642590

Molecular pharmacology of homologues of ibotenic acid at cloned metabotropic glutamic acid receptors.
PubMedID: 9696422

Isomers of 2-amino-7-phosphonoheptanoic acid as antagonists of neuronal excitants.
PubMedID: 6755315