

**Product Name:** MNI caged kainic acid

**Catalog No.:** 2225

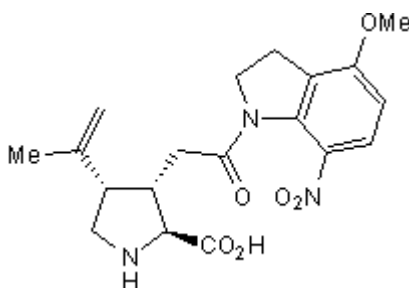
**Batch No.:** 3

**CAS Number:** 1315378-75-6

**IUPAC Name:** (2S,3S,4S)-Carboxy-4-(1-methylethenyl)-3-pyrrolidineacetic acid 4-methoxy-7-nitro-1*H*-indolinyll amide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>19</sub>H<sub>23</sub>N<sub>3</sub>O<sub>6</sub>·H<sub>2</sub>O  
**Batch Molecular Weight:** 407.42  
**Physical Appearance:** White solid  
**Solubility:** water to 5 mM with gentle warming  
DMSO to 100 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 99.1% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	56.01	6.18	10.31
Found	56.13	6.39	10.11

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

Kainic acid (Cat. No. 0222) caged with the photosensitive 4-methoxy-7-nitroindolinyll group. Generates large inward currents at resting membrane potential upon wide field photolysis in Purkinje neurons.

**Physical and Chemical Properties:**

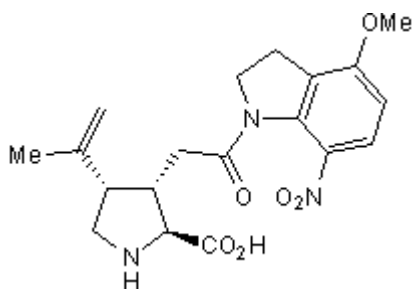
Batch Molecular Formula: C<sub>19</sub>H<sub>23</sub>N<sub>3</sub>O<sub>6</sub>.H<sub>2</sub>O

Batch Molecular Weight: 407.42

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Store at -20°C

**CAUTION** - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**Solubility & Usage Info:**

water to 5 mM with gentle warming

DMSO to 100 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**

**Maier et al** (2005) Comparative analysis of inhibitor effects of caged ligands for the NMDA receptor. *J.Neurosci.Meths.* **142** 1.

**Crawford et al** (2010) New caged neurotransmitter analogues based on methoxy-nitroindole and nitrophenylethoxycarbonyl caging groups are selective for glutamate receptor subtypes. 010 Neuroscience Meeting Planner. San Diego, CA: S.

**Palma-Cerda et al** (2012) New caged neurotransmitter analogs selective for glutamate receptor sub-types based on methoxynitroindoline and nitrophenylethoxycarbonyl caging groups. *Neuropharmacology.* **63** 624. PMID: 22609535.

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