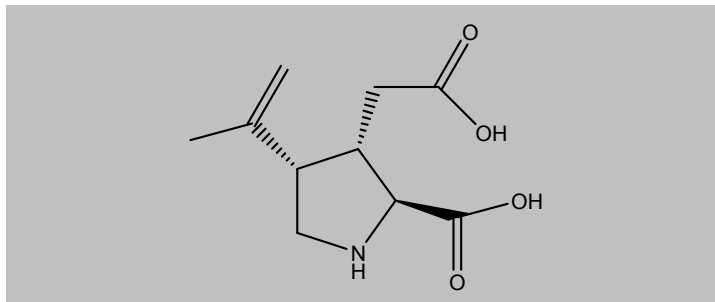


**Certificate Of Analysis**  
**Quality Control Testing and Research Application**COA Preparation Date: 12/11/2013  
COA Revision Date: 12/11/2016

**Product:** Kainic acid  
**Cat. No.:** BN0281  
**Batch No.:** 0281BN/08  
**Chemical Name:** (2S,3S,4R)-Carboxy-4-(1-methylethenyl)-3-pyrrolidineacetic acid; Kainate

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>10</sub>H<sub>15</sub>NO<sub>4</sub> · H<sub>2</sub>O  
**Batch Molecular Weight:** 231.25  
**CAS No.:** [487-79-6]  
**Physical Appearance:** Off-white solid  
**Melting Point:**  
**Solubility:** Soluble to 25 mM in water  
**Storage:** RT  
**Batch Molecular Structure:**



**Product Description:** **Prototype agonist at the Kainate class of ionotropic Glutamate receptors. Induces seizures and neurodegeneration *in vivo* and is used to induce experimental epilepsy in rodents and to study the mechanisms of excitation-induced neuronal apoptosis.**

**References:** 1. Watkins and Evans (1981) Ann Rev Pharmacol Toxicol 21:165; 2. Hampson and Manalo (1998) Nat Toxins 6:153

- CAUTION - Not fully tested. For Research use only. Not for human use. –

**Certificate Of Analysis**  
**Quality Control Testing and Research Application**

COA Preparation Date: 12/11/2013  
 COA Revision Date: 12/11/2016

**BN0281 Kainic acid**

**2. ANALYTICAL DATA**

HPLC: corresponds to the reference

MS: corresponds to the reference

Tests: Optical rotation:  $-15^{\circ}$  ( $[\alpha]_D$ , c = 1, solvent = water) (complies); HPLC Assay: > 99% (complies).

HPLC Analysis Report

Purity	<b>#1: 99.3%</b>
Analytical Column :	<b>LiChroCART 125-4, RP-18 (5um)</b>
Guard Column:	<b>None</b>
Mobile Phase Composition	<b>A Acetonitrile 15%</b> <b>B Water 85%</b>
Running Conditions	
Flow Rate (mL/min)	<b>0.5</b>
Injection Volume (ul)	<b>10.0</b>
UV Detection Wave Length (nm)	<b>254</b>
AUFS	<b>0.100</b>
End Time (min)	<b>7.00</b>
Retention Time (min)	<b>3.2</b>
Other test Conditions:	Room Temperature

\* **Notice:** HPLC conditions are not optimized

- CAUTION - Not fully tested. For Research use only. Not for human use. –