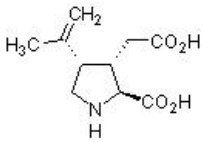
abcam

Product datasheet

Kainic acid (mM/ml), Prototypic kainate receptor agonist ab144490

34 References 2 Images

Overview

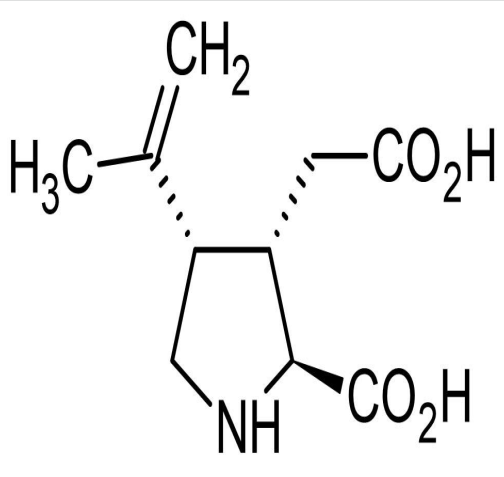
Product name	Kainic acid (mM/ml), Prototypic kainate receptor agonist
Description	Prototypic kainate receptor agonist. 1 ml water soluble pack.
Biological description	Prototypic agonist at the kainate class of ionotropic glutamate receptors. Potent excitant and neurotoxin, used to model epilepsy and neurodegenerative states. Soluble in 1 ml water to give specified mM/ml concentration. **Find out more.**
Purity	> 99%
CAS Number	487-79-6
Chemical structure	

Properties

Chemical name	(2*S*,3*S*,4*S*)-3-(Carboxymethyl)-4-(prop-1-en-2-yl)pyrrolidine-2-carboxylic acid
Molecular weight	213.23
Molecular formula	$C_{10}H_{15}NO_4$
PubChem identifier	10255
Storage instructions	Store at +4°C. Store under desiccating conditions. The product can be stored for up to 12 months.
Solubility overview	Soluble in 1ml of water to give specified mM/ml concentration
Handling	Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour. Need more advice on solubility, usage and handling? Please visit our **frequently asked questions (FAQ) page** for more details.

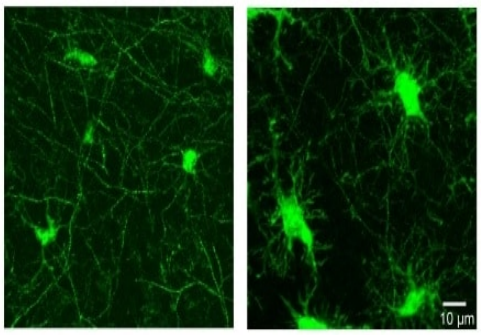
SMILES	CC(=C)[C@H]1CN[C@@H]([C@H]1CC(=O)O)C(=O)O
Source	*Digenea simplex*

Images



Chemical Structure - Kainic acid (mM/ml), Prototypic kainate receptor agonist (ab144490)

2D chemical structure image of ab144490, Kainic acid (mM/ml), Prototypic kainate receptor agonist



Immunocytochemistry/ Immunofluorescence - Kainic acid (mM/ml), Prototypic kainate receptor agonist (ab144490)

Image from Menteyne, A et al., PloS one., 4(8): e6770. Fig 1A; doi: 10.1371/journal.pone.0006770

Immunocytochemistry/ Immunofluorescence analysis of microglial cells in the stratum radiatum of the CA1 region of the hippocampus of CX3CR1egfp/+ mice in control conditions (left) or 48 hours after status epilepticus (SE) induced by intra-peritoneal injection of kainate (right). Each image is a maximum intensity z-projection of 31 confocal slices for a total thickness of 12 µm.

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