

## Product datasheet

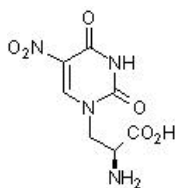
# (S)-5-Nitrowillardine, AMPA / kainate agonist ab120063

[1 References](#) [2 Images](#)

### Overview

<b>Product name</b>	(S)-5-Nitrowillardine, AMPA / kainate agonist
<b>Description</b>	AMPA / kainate agonist
<b>Biological description</b>	Broad spectrum agonist for AMPA and kainate receptors with no activity at NMDA or metabotropic receptors

### Chemical structure



### Properties

<b>Chemical name</b>	(S)-2-Amino-3-(3,4-dihydro-5-nitro-2,4-dioxypyrimidin-1(2H)-yl)propanoic acid
<b>Molecular weight</b>	244.16
<b>Molecular formula</b>	C <sub>7</sub> H <sub>8</sub> N <sub>4</sub> O <sub>6</sub>
<b>PubChem identifier</b>	11096831
<b>Storage instructions</b>	Store at +4°C. Store under desiccating conditions. The product can be stored for up to 12 months.
<b>Solubility overview</b>	Soluble in 1 eq. NaOH to 50 mM
<b>Handling</b>	<p>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.</p> <p>Need more advice on solubility, usage and handling? Please visit our <a href="#">frequently asked questions (FAQ) page</a> for more details.</p>
<b>SMILES</b>	<chem>N[C@@H](CN1C=C(C(=O)NC1=O)[N+](=[O-])=O)C(=O)O</chem>
<b>Source</b>	Synthetic

## Applications

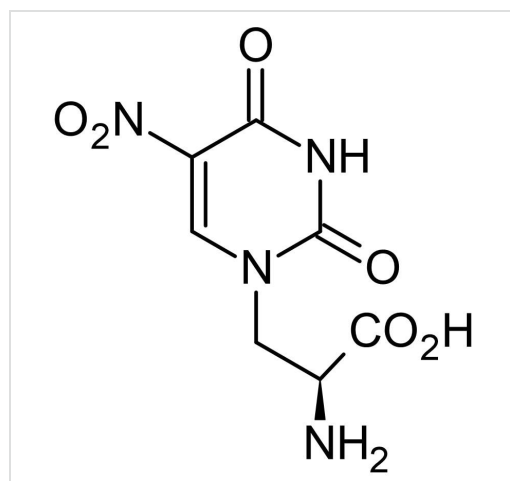
### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab120063 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

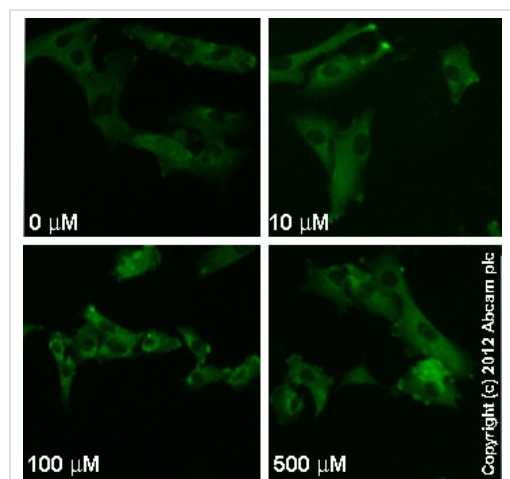
Application	Abreviews	Notes
Functional Studies		Use at an assay dependent concentration.

## Images



2D chemical structure image of ab120063, (S)-5-Nitrowillardiine, AMPA / kainate agonist

Chemical Structure - (S)-5-Nitrowillardiine, AMPA / kainate agonist (ab120063)



Functional Studies - (S)-5-Nitrowillardiine, AMPA / kainate agonist (ab120063)

**ab96379** staining MEK1 (phospho S298) in SK-N-SH cells treated with (S)-5-Nitrowillardiine (ab120063), by ICC/IF. Increase in MEK1 (phospho S298) expression correlates with increased concentration of (S)-5-Nitrowillardiine, as described in literature.

The cells were incubated at 37°C for 24h in media containing different concentrations of ab120063 ((S)-5-Nitrowillardiine) in DMSO, fixed with 4% formaldehyde for 10 minutes at room temperature and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with **ab96379** (1/100 dilution) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat anti-rabbit polyclonal antibody (**ab96899**) at 1/250 dilution was used as the secondary antibody.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"

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- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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