## abcam

#### Product datasheet

### NMDA, excitotoxic amino acid ab120052

17 References 画像数 3

製品の概要

製品名 NMDA, excitotoxic amino acid

製品の詳細 Excitotoxic amino acid

生理活性の詳細 Excitotoxic amino acid. Prototypic agonist at the ionotropic NMDA glutamate receptor which is

involved in long-term potentiation, ischemia, and epilepsy. Also available in Kit: lonotropic

agonists (ab120323).

Also available in simple stock solutions (ab146698) - add 1 ml of water to get an exact, ready-to-

use concentration.

**CAS 番号** 6384-92-5

構造式 H<sub>3</sub>C<sub>NH</sub>

HO<sub>2</sub>C CO<sub>2</sub>H

製品の特性

体系名 (R)-2-(Methylamino)succinic acid

 分子量
 147.13

 分子式
 C<sub>5</sub>H<sub>9</sub>NO<sub>4</sub>

PubChem 登録番号 22880

保存方法 Store at +4°C. Store under desiccating conditions. The product can be stored for up to 12

months.

溶解性 Soluble in water to 100 mM

使用に関する注意 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.

Refer to SDS for further information

Need more advice on solubility, usage and handling? Please visit our frequently asked

questions (FAQ) page for more details.

**SMILES** 線形表記 OC(=O)C[C@@H](NC)C(=O)O

1

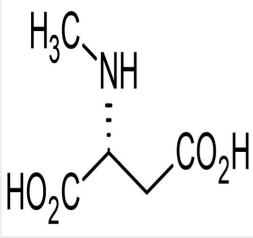
#### アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab120052の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Functional Studies		Use at an assay dependent concentration.

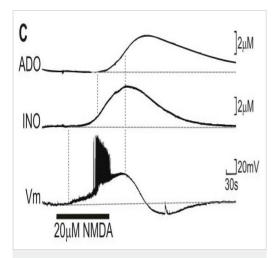
#### 画像

(ab120052)



Chemical Structure - NMDA, excitotoxic amino acid

2D chemical structure image of ab120052, NMDA, excitotoxic amino acid

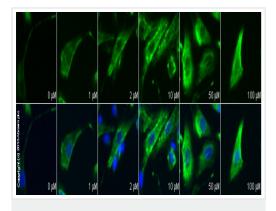


# Functional Studies - NMDA, excitotoxic amino acid (ab120052)

Sims et al PLoS One. 2013;8(1):e53814. doi: 10.1371/journal.pone.0053814. Epub 2013 Jan 11. Fig 1. Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

#### Release of adenosine by depolarisation and agonists.

(Panel c) NMDA application also evoked neuronal depolarisation and firing accompanied by subsequent release of adenosine and inosine.



Immunocytochemistry/ Immunofluorescence - NMDA, excitotoxic amino acid (ab120052)

<u>ab55051</u> staining GABA B receptor 1 in SK-N-SH cells treated with NMDA (ab120052), by ICC/IF. Internalization of GABA B receptor 1 correlates with increased concentration of NMDA, as described in literature.

The cells were incubated at 37°C for 30 minutes in media containing different concentrations of ab120052 (NMDA) 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 ab55051 (1  $\mu$ g/ml) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat anti-mouse polyclonal antibody (ab96879) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.

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

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