



Certificate of Analysis

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Product Name: LY 341495 Catalog No.: 1209 Batch No.: 14

CAS Number: 201943-63-7

IUPAC Name: (2S)-2-Amino-2-[(1S,2S)-2-carboxycycloprop-1-yl]-3-(xanth-9-yl) propanoic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{20}H_{19}NO_5.1\frac{1}{2}H_2O$

Batch Molecular Weight: 380.39

Physical Appearance: Off-white solid

Solubility: DMSO to 10 mM with gentle warming

1.2eq. NaOH to 100 mM

Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.7$ (Ethanol:Ammonium hydroxide: Water[6:3:1])

HPLC: Shows 98.7% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Optical Rotation: $[\alpha]_D = +25$ (Concentration = 0.5, Solvent = Water)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 63.15 5.83 3.68 Found 62.8 5.49 3.75



Product Information

Print Date: Oct 14th 2013

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Description:

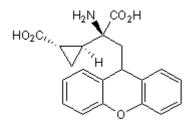
Highly potent and selective group II metabotropic glutamate receptor antagonist (K_i/IC_{50} values are 2.3, 1.3, 173, 990, 6800, 8200 and 22000 nM for human mGlu₂, mGlu₃, mGlu₈, mGlu_{7a}, mGlu_{1a}, mGlu_{5a} and mGlu_{4a} receptors respectively). Readily brain penetrant and active in vivo. Disodium salt (Cat. No. 4062) also available. Also available as part of the Group II mGlu Receptor TocrisetTM, Group III mGlu Receptor TocrisetTM and Mixed mGlu Receptor TocrisetTM.

Physical and Chemical Properties:

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Batch Molecular Weight: 380.39 Physical Appearance: Off-white solid

Minimum Purity: >98% Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

DMSO to 10 mM with gentle warming 1.2eq. NaOH 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:

Fitzjohn *et al* (1998) The potent mGlu receptor antagonist LY341495 identifies roles for both cloned and novel mGlu receptors in hippocampal synaptic plasticity. Neuropharmacology **37** 1445. PMID: 9886667.

Kingston *et al* (1998) LY341495 is a nanomolar potent and selective antagonist of group II metabotropic glutamate receptors. Neuropharmacology **37** 1. PMID: 9680254.

Ornstein *et al* (1998) 2-Substituted (2SR)-2-amino-2-((1SR,2SR)-2-carboxycycloprop-1-yl) glycines as potent and selective antagonists of group II metabotropic glutamate receptors. 2. Effects of aromatic substitution, pharmacological characterization, and bioavailability. J.Med.Chem. *41* 358. PMID: 9464367.

Johnson *et al* (1999) [3H]-LY341495 as a novel antagonist radioligand for group II metabotropic glutamate receptors: characterization of binding to membranes of mGlu receptor subtype expressing cells. Neuropharmacology **38** 1519. PMID: 10530814.

