

Certificate of Analysis

www.tocris.com

Product Name: Bay 36-7620

Catalog No.: 2501

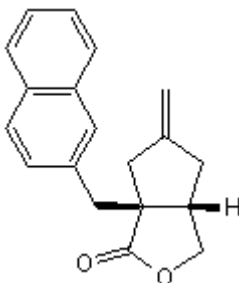
Batch No.: 4

CAS Number: 232605-26-4

IUPAC Name: (3a*S*,6a*S*)-Hexahydro-5-methylene-6a-(2-naphthalenylmethyl)-1*H*-cyclopenta[*c*]furan-1-one

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₉H₁₈O₂
Batch Molecular Weight: 278.35
Physical Appearance: White solid
Solubility: DMSO to 100 mM
ethanol to 100 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.66 (Ethyl acetate:Petroleum ether [4:1])
HPLC: Shows 99.7% purity
Chiral HPLC: Shows 100% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Optical Rotation: [α]_D = -32.6 (Concentration = 1, Solvent = DCM)
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	81.99	6.52	
Found	81.81	6.47	0.05

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Name: Bay 36-7620

Catalog No.: 2501

Batch No.: 4

CAS Number: 232605-26-4

IUPAC Name: (3a*S*,6a*S*)-Hexahydro-5-methylene-6a-(2-naphthalenylmethyl)-1*H*-cyclopenta[*c*]furan-1-one

Description:

Selective mGlu₁ receptor non-competitive antagonist (IC₅₀ = 0.16 μM) with inverse agonist activity. Impairs classical conditioning and associated synaptic plasticity in hippocampal neurons. Exhibits neuroprotective and anticonvulsive effects in vivo following systemic administration.

Physical and Chemical Properties:

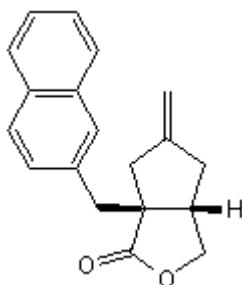
Batch Molecular Formula: C₁₉H₁₈O₂

Batch Molecular Weight: 278.35

Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:



References:

Carroll et al (2001) BAY36-7620: a potent non-competitive mGlu₁ receptor antagonist with inverse agonist activity. *Mol.Pharmacol.* **59** 965. PMID: 11306677.

De Vry et al (2001) Neuroprotective and behavioural effects of the selective metabotropic glutamate mGlu₁ receptor antagonist BAY 36-7620. *Eur.J.Pharmacol.* **428** 203. PMID: 11675037.

Gil-Sanz et al (2007) Involvement of the mGluR1 receptor in hippocampal synaptic plasticity and associative learning in behaving mice. *Cereb.Cortex* **18** 1653. PMID: 18024992.

Storage: Store at +4°C

Solubility & Usage Info:

DMSO to 100 mM

ethanol 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.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel: +1 612 379 2956