Certificate of Analysis

www.tocris.com

Print Date: Nov 1st 2019

GT 949 Product Name:

Catalog No.: 6578 Batch No.: 1

CAS Number: IUPAC Name:

Storage:

460330-27-2

3-((4-Cyclohexylpiperazin-1-yl)(1-phenethyl-1H-tetrazol-5-yl)methyl)-6-methoxyquinolin-2(1H)-one

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: Batch Molecular Weight: Physical Appearance: Solubility:

Batch Molecular Structure:

 $C_{30}H_{37}N_7O_2$ 527.66 Off White solid DMSO to 100 mM ethanol to 10 mM with gentle warming Store at -20°C

2. ANALYTICAL DATA

TLC: HPLC: ¹H NMR: Mass Spectrum: Microanalysis:

R_f = 0.5 (Dichloromethane:Methanol [9:1]) Shows 99.6% purity Consistent with structure Consistent with structure Carbon Hydrogen Nitrogen Theoretical 68.29 7.07 18.58 Found 67.97 7.01 18.79

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

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Product Information

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IUPAC Name: 3-((4-Cyclohexylpiperazin-1-yl)(1-phenethyl-1*H*-tetrazol-5-yl)methyl)-6-methoxyquinolin-2(1*H*)-one

Description:

Potent and selective EAAT2 positive allosteric modulator (EC₅₀ = 0.26 nM). Enhances the glutamate translocation rate, with no effect on substrate interaction. Enhances glutamate uptake by cultured astrocytes by approximately 58%. Exhibits no significant effect on DAT, SERT and NET or NMDA receptors. Neuroprotective in an in vitro model of excitotoxicity.

Physical and Chemical Properties:

Batch Molecular Formula: C₃₀H₃₇N₇O₂ Batch Molecular Weight: 527.66 Physical Appearance: Off White solid

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM ethanol to 10 mM with gentle warming

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a $45-60^{\circ}C$ water bath).

Catalog No.: 6578

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:

Falcucci et al (2019) Novel Positive Allosteric Modulators of Glutamate Transport Have Neuroprotective Properties in an in Vitro Excitotoxic Model. ACS Chem.Neurosci. 10 3437. PMID: 31257852.

Kortagere et al (2018) Identification of novel allosteric modulators of glutamate transporter EAAT2. ACS Chem.Neurosci. 9 522. PMID: 29140675.

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