

Certificate of Analysis

Print Date: Jan 14th 2016

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Product Name: ACT 335827 Catalog No.: 4983 Batch No.: 2

CAS Number: 1354039-86-3

IUPAC Name: (aR,1S)-1-[(3,4-Dimethoxyphenyl)methyl]-3,4-dihydro-6,7-dimethoxy-N-(1-methylethyl)-a-phenyl-2(1H)-

isoquinolineacetamide

1. PHYSICAL AND CHEMICAL PROPERTIES

 $C_{31}H_{38}N_2O_5$. 4H2O **Batch Molecular Formula:**

523.14 **Batch Molecular Weight:**

Physical Appearance: Off-white solid DMSO to 100 mM Solubility: ethanol to 100 mM

Store at -20°C

Storage:

Batch Molecular Structure:

2. ANALYTICAL DATA

 $R_f = 0.4$ (Ethyl acetate:Petroleum ether [2:1]) TLC:

HPLC: Shows >98.7% purity **Chiral HPLC:** Shows 100% purity

¹H NMR: Consistent with structure **Mass Spectrum:** Consistent with structure

 $[\alpha]_D$ = -9.8 (Concentration = 1, Solvent = Chloroform) **Optical Rotation:**

Microanalysis: Carbon Hydrogen Nitrogen

> Theoretical 71.17 7.42 5.35 Found 71 7.39 5.38



Product Information

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isoquinolineacetamide

Description:

Potent and selective orexin OX_1 receptor antagonist (K_b values are 41 and 560 nM for OX_1 and OX_2 receptors respectively). Elicits anxiolytic effects in vivo. Brain penetrant and orally available.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{31}H_{38}N_2O_5.\%H_2O$

Batch Molecular Weight: 523.14 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 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:

Steiner *et al* (2013) Discovery and characterization of ACT-335827, an orally available, brain penetrant orexin receptor type 1 selective antagonist. ChemMedChem *8* 898. PMID: 23589487.