



Certificate of Analysis

www.tocris.com

Product Name: Arbidol Catalog No.: 7235 Batch No.: 1

CAS Number: 131707-23-8

IUPAC Name: Ethyl 6-Bromo-4-((dimethylamino)methyl)-5-hydroxy-1-methyl-2-((phenylthio)methyl)-1*H*-indole-3-carboxylate

hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₂H₂₅BrN₂O₃S.HCl.³/₄H₂O

Batch Molecular Weight: 527.39

Physical Appearance: Off-white solid

Solubility: ethanol to 100 mM

DMSO to 100 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 100% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 50.1 5.26 5.31 Found 49.81 5.31 5.52

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



Product Information

Print Date: Jul 6th 2020

www.tocris.com

Product Name: Arbidol Catalog No.: 7235 Batch No.: 1

CAS Number: 131707-23-8

IUPAC Name: Ethyl 6-Bromo-4-((dimethylamino)methyl)-5-hydroxy-1-methyl-2-((phenylthio)methyl)-1*H*-indole-3-carboxylate

hydrochloride

Description:

Broad spectrum antiviral. Displays activity against a range of respiratory and hepatitis viruses including influenza A, B and C, adenovirus, and hepatitis B and C. Increases stability of influenza viral hemagglutinins (HA) and prevents low-pH HA transition so inhibiting viral fusion. Also inhibits SARS-CoV-2 infection in vitro (IC50 = 4.11 μ M).

Physical and Chemical Properties:

Batch Molecular Formula: C₂₂H₂₅BrN₂O₃S.HCl.³/₄H₂O

Batch Molecular Weight: 527.39 Physical Appearance: Off-white solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

ethanol to 100 mM DMSO 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:

Wang et al (2020) The anti-influenza virus drug, arbidol is an efficient inhibitor of SARS-CoV-2 in vitro. Cell Discov. 6 28. PMID: 32373347.

Boriskin et al (2008) Arbidol: a broad-spectrum antiviral compound that blocks viral fusion. Curr.Med.Chem. 15 997. PMID: 18393857.