

Certificate of Analysis

Print Date: May 14th 2020

www.tocris.com

Product Name: Dynapyrazole A Catalog No.: 6896 Batch No.: 1

CAS Number: 2226517-75-3

IUPAC Name: 2-[1-(4-Chlorophenyl)cyclopropyl]-4,5-dihydro-7-iodo-5-oxopyrazolo[1,5-a]quinazoline-3-carbonitrile

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{20}H_{12}CIIN_4O.^3/4H_2O$

Batch Molecular Weight: 500.21

Physical Appearance: White solid

Solubility: DMSO to 20 mM Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.8% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 48.02 2.72 11.2 Found 47.7 2.73 11.16



Product Information

Print Date: May 14th 2020

www.tocris.com

Product Name: Dynapyrazole A Catalog No.: 6896 Batch No.: 1

CAS Number: 2226517-75-3

IUPAC Name: 2-[1-(4-Chlorophenyl)cyclopropyl]-4,5-dihydro-7-iodo-5-oxopyrazolo[1,5-a]quinazoline-3-carbonitrile

Description:

Dynein inhibitor. Inhibits dynein 1 and dynein 2-dependent microtubule gliding (IC $_{50}$ values are 2.3 and 2.6 $\mu M,$ respectively). Inhibits hedgehog signaling in vitro (IC $_{50}$ = 1.9 $\mu M).$ Displays reversible inhibition of retrograde and anterograde intraflagellar transport in Chlamydomonas; displays stronger inhibition of retrograde transport.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₀H₁₂ClIN₄O.³/₄H₂O

Batch Molecular Weight: 500.21 Physical Appearance: White solid

Minimum Purity: ≥98% Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 20 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:

Steinman et al (2017) Chemical structure-guided design of dynapyrazoles, cell-permeable dynein inhibitors with a unique mode of action. Elife 6 e25174. PMID: 28524820.