



Certificate of Analysis

www.tocris.com

Product Name: GSK 626616 Catalog No.: 6638 Batch No.: 2

CAS Number: 1025821-33-3

IUPAC Name: (5Z)-2-[(2,6-Dichlorophenyl)amino]-5-(6-quinoxalinylmethylene)-4(5H)-thiazolone

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{18}H_{10}Cl_2N_4OS.\frac{1}{4}H_2O$

Batch Molecular Weight: 405.77

Physical Appearance: Dark purple solid
Solubility: DMSO to 100 mM
Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 97.6% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 53.28 2.61 13.81 Found 52.91 2.36 13.52

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



Product Information

Print Date: Oct 11th 2024

www.tocris.com

Product Name: GSK 626616 Catalog No.: 6638 2

CAS Number: 1025821-33-3

IUPAC Name: (5Z)-2-[(2,6-Dichlorophenyl)amino]-5-(6-quinoxalinylmethylene)-4(5H)-thiazolone

Description:

GSK 626616 is a potent and selective DYRK inhibitor ($IC_{50} = 0.7$ nM for DYRK3, similar potency for DYRK1 and 2). Exhibits ~20-fold selectivity over casein kinase 2 and negligible activity against a panel of 451 kinases screened. Enhances number of CFU-E stimulated by Epo from human marrow. Increases hemoglobin levels in anemic mice. Orally bioavailable.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₈H₁₀Cl₂N₄OS.1/₄H₂O

Batch Molecular Weight: 405.77

Physical Appearance: Dark purple solid

Minimum Purity: ≥95%

Batch Molecular Structure:

Storage: Store at +4°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

Rai et al (2018) Kinase-controlled phase transition of membraneless organelles in mitosis. Nature 559 211. PMID: 29973724.

Wippich et al (2013) Dual specificity kinase DYRK3 couples stress granule condensation/dissolution to mTORC1 signaling. Cell 152 791. PMID: 23415227.

Erickson-Miller et al (2007) GSK626616: A DYRK3 inhibitor as a potential new therapy for the treatment of anemia. Blood 110 510.