Certificate of Analysis

www.tocris.com

Print Date: Jul 28th 2021

Product Name: SU 5416

CAS Number: 204005-46-9

IUPAC Name: 3-[(3,5-Dimethyl-1*H*-pyrrol-2-yl)methylene]-1,3-dihydro-2*H*-indol-2-one

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: Batch Molecular Weight: Physical Appearance: Solubility: C₁₅H₁₄N₂O 238.28 Orange solid DMSO to 100 mM ethanol to 10 mM with gentle warming Desiccate at -20°C

Storage: Batch Molecular Structure:

2. ANALYTICAL DATA

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

R_f = 0.6 (Dichloromethane:Methanol [97:3]) Shows 99.9% purity Consistent with structure Consistent with structure Carbon Hydrogen Nitrogen

Theoretical	75.61	5.92	11.76
Found	75.48	5.9	11.77

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

bio-techne.com	North America	China	Europe Middle East Africa	Rest of World
info@bio-techne.com techsupport@bio-techne.com	Tel: (800) 343 7475	info.cn@bio-techne.com Tel: +86 (21) 52380373	Tel: +44 (0)1235 529449	www.tocris.com/distributors Tel:+1 612 379 2956



7 Batch No.: 7

Catalog No.: 3037

TOCRIS a biotechne brand

Product Information

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3-[(3,5-Dimethyl-1H-pyrrol-2-yl)methylene]-1,3-dihydro-2H-indol-2-one

Description:

IUPAC Name:

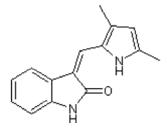
SU 5416, an angiogenesis inhibitor, is a potent vascular endothelial growth factor receptor tyrosine kinase 1/2 inhibitor ($IC_{50} = 40$ nM). SU 5416 also potently inhibits c-Kit, FLT3 and RET tyrosine kinases (IC_{50} values are 30 nM, 160 nM and 170 nM, respectively). SU 5416 shows inhibition of tumour growth and vascularization and can be used to generate an animal model of pulmonary arterial hypertension.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₅H₁₄N₂O Batch Molecular Weight: 238.28 Physical Appearance: Orange solid

Minimum Purity: ≥99%

Batch Molecular Structure:



Storage: Desiccate 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).

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:

Ciuclan et al (2011) A novel murine model of severe pulmonary arterial hypertension. Am.J.Respir.Crit. Care Med. 184 1171. PMID: 21868504.

Mologni et al (2006) Inhibition of RET tyrosine kinase by SU5416. J.Mol.Endocrinol. 37 199. PMID: 17032739.

Smolich et al (2001) The antiangiogenic protein kinase inhibitors SU5416 and SU6668 inhibit the SCF receptor (c-Kit) in a human myeloid leukemia cell line and in acute myeloid leukemia blasts. Blood **97** 1413. PMID: 11222388.

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bio-techne.comNorth AmericaChinaEurope Middle East AfricaRest of Worldinfo@bio-techne.comTel: (800) 343 7475info.cn@bio-techne.comTel: +44 (0) 1235 529449www.tocris.com/distributorstechsupport@bio-techne.comTel: +86 (21) 52380373Tel: +44 (0) 1235 529449www.tocris.com/distributors

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