

Certificate of Analysis

Print Date: Oct 30th 2014

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Product Name: SU 5402 Catalog No.: 3300 Batch No.: 8

CAS Number: 215543-92-3

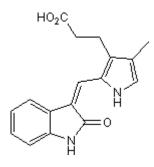
IUPAC Name: 2-[(1,2-Dihydro-2-oxo-3H-indol-3-ylidene)methyl]-4-methyl-1H-pyrrole-3-propanoic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

 $C_{17}H_{16}N_2O_3$ **Batch Molecular Formula: Batch Molecular Weight:** 296.32 **Physical Appearance:** Orange solid

Solubility: DMSO to 100 mM Store at -20°C Storage:

Batch Molecular Structure:



2. ANALYTICAL DATA

 $R_f = 0.5$ (Dichloromethane:Methanol [9:1]) TLC:

HPLC: Shows 98.9% purity

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

Microanalysis:

Carbon Hydrogen Nitrogen

Theoretical 68.91 5.44 9.45 Found 68.78 5.45 9.51



Product Information

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IUPAC Name: 2-[(1,2-Dihydro-2-oxo-3*H*-indol-3-ylidene)methyl]-4-methyl-1*H*-pyrrole-3-propanoic acid

Description:

Potent and selective vascular endothelial growth factor receptor (VEGFR) and fibroblast growth factor receptor (FGFR) inhibitor (IC $_{50}$ values are 0.02, 0.03, 0.51 and > 100 μM at VEGFR2, FGFR1, PDGFR β and EGFR respectively). Inhibits embryonic left-right determination and exhibits potent anticancer activity in vitro and in vivo. Also attenuates integrin $\beta\text{4-induced}$ differentiation of neural stem cells.

Physical and Chemical Properties:

Batch Molecular Formula: C₁₇H₁₆N₂O₃ Batch Molecular Weight: 296.32 Physical Appearance: Orange solid

Minimum Purity: >95%

Batch Molecular Structure:

Storage: Store at -20°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

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved

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:

Sun *et al* (1999) Design, synthesis and evaluations of substituted 3-[(3- or 4-carboxyethylpyrrol-2-yl)methylidenyl]indolin-2-ones as inhibitors of VEGF, FGF and PDGF receptor tyrosine kinases. J.Med.Chem. *42* 5120. PMID: 10602697.

Paterson et al (2004) Preclinical studies of fibroblast growth factor receptor 3 as a therapeutic target in multiple myeloma. Br.J.Haematol. 124 595. PMID: 14871245.

Tanaka et al (2005) FGF-induced vesicular release of sonic hedgehog and retinoic acid in leftward nodal flow is critical for left-right determination. Nature **435** 172. PMID: 15889083.

Su et al (2009) Neural stem cell differentiation is mediated by integrin beta4 in vitro. Int.J.Biochem.Cell Biol. 41 916. PMID: 18834954.

