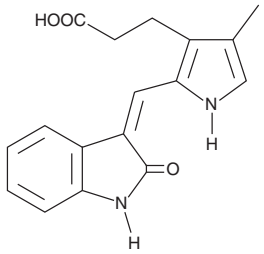
PRODUCT INFORMATION

SU 5402

Item No. 13182

CAS Registry No.:	215543-92-3
Formal Name:	2-[(1,2-dihydro-2-oxo-3H-indol-3-ylidene) methyl]-4-methyl-1H-pyrrole-3-propanoic acid
MF:	$C_{17}H_{16}N_2O_3$
FW:	296.3
Purity:	≥95%
UV/Vis.:	λ_{max}: 210, 275, 430 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

SU 5402 is supplied as a crystalline solid. A stock solution may be made by dissolving the SU 5402 in the solvent of choice, which should be purged with an inert gas. SU 5402 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of SU 5402 in these solvents is approximately 30 and 5 mg/ml, respectively.

SU 5402 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SU 5402 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. SU 5402 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

SU 5402 is an inhibitor of the tyrosine kinase domains of VEGFR2, FGFR1, and PDGFRβ (IC_{50}s = 0.02, 0.03, and 0.51 µM, respectively).[1] It is much less effective against other receptor tyrosine kinases.[1] SU 5402 is commonly used to evaluate the role of FGFR1 in cellular functions.[2-5]

References

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2. Heryanto, B., Lipson, K. E., and Rogers, P. A. W. Effect of angiogenesis inhibitors on oestrogen-mediated endometrial endothelial cell proliferation in the ovariectomized mouse. *Reproduction* **125**, 337-346 (2003).
3. Ying, Q. L., Wray, J., Nichols, J., *et al.* The ground state of embryonic stem cell self-renewal. *Nature* **453**, 519-524 (2008).
4. Hasse, C., Holz, O., Lange, E., *et al.* FGFR-ERK signaling is an essential component of tissue separation. *Dev. Biol.* **395(1)**, 154-166 (2014).
5. Kachel, P., Trojanowicz, B., Sekulla, C., *et al.* Phosphorylation of pyruvate kinase M2 and lactate dehydrogenase A by fibroblast growth factor receptor 1 in benign and malignant thyroid tissue. *BMC Cancer* **15:140**, (2015).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM