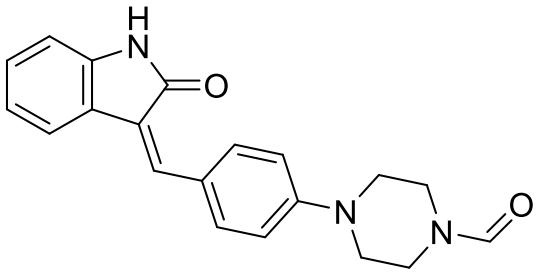
Product data sheet

MedKoo Cat#: 406474 Name: SU4984 CAS#: 186610-89-9 Chemical Formula: $C_{20}H_{19}N_3O_2$ Exact Mass: 333.1477 Molecular Weight: 333.38	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years.
	In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:
SU4984 is a cell-permeable, reversible, and ATP-competitive inhibitor of the tyrosine kinase activity of fibroblast growth factor receptor 1.

2. CoA, QC data, SDS, and handling instruction
SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under "QC And Documents" section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	50	149.98

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	3.00 mL	15.00 mL	30.00 mL
5 mM	0.60 mL	3.00 mL	6.00 mL
10 mM	0.30 mL	1.50 mL	3.00 mL
50 mM	0.06 mL	0.30 mL	0.60 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator
Please refer the product web page under section of "Calculator"

6. Recommended literature which reported protocols for in vitro and in vivo study
In vitro study

1. Chen G, Weng Q, Fu L, Wang Z, Yu P, Liu Z, Li X, Zhang H, Liang G. Synthesis and biological evaluation of novel oxindole-based RTK inhibitors as anti-cancer agents. Bioorg Med Chem. 2014 Dec 15;22(24):6953-60. doi: 10.1016/j.bmc.2014.10.017. Epub 2014 Oct 29. PMID: 25456085.
2. Ma Y, Carter E, Wang X, Shu C, McMahon G, Longley BJ. Indolinone derivatives inhibit constitutively activated KIT mutants and kill neoplastic mast cells. J Invest Dermatol. 2000 Feb;114(2):392-4. doi: 10.1046/j.1523-1747.2000.00888.x. PMID: 10652004.

In vivo study

To be determined

7. Bioactivity
Biological target:

SU4984 has an IC50 of 10-20 μM for fibroblast growth factor receptor 1 (FGFR1).

In vitro activity

SU4984, SU6577, and SU5614 were effective against KIT with juxtamembrane activating mutations, but only SU6577 could suppress KIT containing either juxtamembrane or kinase domain activating mutations. SU4984, SU6577, and SU5614 killed neoplastic mast

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cells expressing a juxtamembrane-mutated KIT. SU4984 and SU6577 killed neoplastic mast cells expressing KIT bearing a kinase domain mutation.

Reference: J Invest Dermatol. 2000 Feb;114(2):392-4. https://pubmed.ncbi.nlm.nih.gov/10652004/

In vivo activity

To be determined

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.