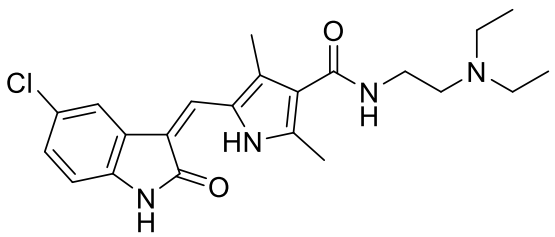
Product data sheet

MedKoo Cat#: 532798 Name: SU11652 CAS#: 326914-10-7 Chemical Formula: $C_{22}H_{27}ClN_4O_2$ Exact Mass: 414.1823 Molecular Weight: 414.93	
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:
SU11652 is a potent cell-permeable pyrrole-indolinone compound that acts as an ATP-competitive tyrosine kinase receptor and angiogenic inhibitor that exhibits greater selectivity for PDGFR-β (PDGFRβ, IC50 = 3 nM), Flk-1 (VEGFR2, IC50 = 27 nM), FGFR1 (IC50= 170 nM), and Kit family members (IC50=~10-500 nM) over EGFR (IC50 >20 μM). SU11652 displays anti-proliferative and pro-apoptotic properties in tumor cells.

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	4	9.64

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	**1 mg**	**5 mg**	**10 mg**
1 mM	2.41 mL	12.05 mL	24.10 mL
5 mM	0.48 mL	2.41 mL	4.82 mL
10 mM	0.24 mL	1.21 mL	2.41 mL
50 mM	0.05 mL	0.24 mL	0.48 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. Ellegaard AM, Groth-Pedersen L, Oorschot V, Klumperman J, Kirkegaard T, Nylandsted J, Jäättelä M. Sunitinib and SU11652 inhibit acid sphingomyelinase, destabilize lysosomes, and inhibit multidrug resistance. Mol Cancer Ther. 2013 Oct;12(10):2018-30. doi: 10.1158/1535-7163.MCT-13-0084. Epub 2013 Aug 6. PMID: 23920274.
2. Guo Y, Chen Y, Xu X, Fu X, Zhao ZJ. SU11652 Inhibits tyrosine kinase activity of FLT3 and growth of MV-4-11 cells. J Hematol Oncol. 2012 Dec 6;5:72. doi: 10.1186/1756-8722-5-72. PMID: 23216927; PMCID: PMC3524753.

In vivo study

To be determined

7. Bioactivity
Biological target:

SU11652 exhibits greater selectivity for PDGFRβ (IC50 = 3 nM), VEGFR2 (IC50 = 27 nM), FGFR1 (IC50 = 170 nM), and Kit family members (IC50 = ~ 10-500 nM) over EGFR (IC50 >20 μM). Reported to display anti-proliferative and pro-apoptotic properties in tumor cells.

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In vitro activity

SU11652 is a potent FLT3 inhibitor which selectively targets FLT3-ITD-positive cells. It should serve as a good candidate for development of therapeutic drugs to treat acute myeloid leukemia (AML). SU11652 strongly inhibited the activity of wild type, D835Y, and D835H mutant forms of FLT3 with IC50 values of 1.5, 16, and 32 nM, respectively. It effectively blocked the growth of FLT3-ITD -positive MV-4-11 cells, but exhibited much less effects on cells without FLT3 mutations.

Reference: J Hematol Oncol. 2012 Dec 6;5:72. https://pubmed.ncbi.nlm.nih.gov/23216927/

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.