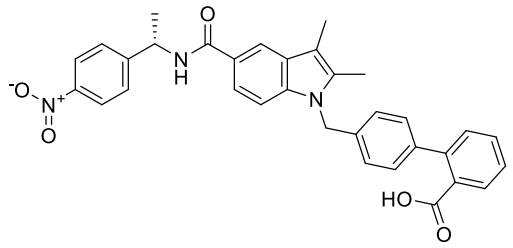
Product data sheet

MedKoo Cat#: 522455 Name: SR1664 CAS: 1338259-05-4 Chemical Formula: $C_{33}H_{29}N_3O_5$ Exact Mass: 547.2107 Molecular Weight: 547.61	
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:
SR1664 is a potent and selective PPARγ inhibitor with potential antidiabetic activity. SR1664 binds to PPARγ and potently inhibits Cdk5-mediated PPARγ phosphorylation without exhibiting PPARγ agonist activity.

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
DMF	20	36.52
DMSO	15	27.39
Ethanol	15	27.39

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	**1 mg**	**5 mg**	**10 mg**
1 mM	2.01 mL	10.06 mL	20.13 mL
5 mM	0.40 mL	2.01 mL	4.03 mL
10 mM	0.20 mL	1.01 mL	2.01 mL
50 mM	0.04 mL	0.20 mL	0.40 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

To be determined

In vivo study

1. McVicker BL, Simpson RL, Hamel FG, Bennett RG. Reduction in Obesity-Related Hepatic Fibrosis by SR1664. Biology (Basel). 2023 Sep 26;12(10):1287. doi: 10.3390/biology12101287. PMID: 37886997; PMCID: PMC10604321.
2. McVicker BL, Hamel FG, Simpson RL, Bennett RG. A Selective PPARγ Modulator Reduces Hepatic Fibrosis. Biology (Basel). 2020 Jul 2;9(7):151. doi: 10.3390/biology9070151. PMID: 32630819; PMCID: PMC7407562.

7. Bioactivity
Biological target:

SR1664 blocks PPARγ)by cyclin-dependent kinase 5 with an IC50 value of 80 nM (Ki = 28.7 nM) without exhibiting agonist activity at the PPARγ receptor.

In vitro activity

To be determined

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In vivo activity

SR1664 improved mice insulin sensitivity and reduced fibrosis in the high fat and high carbohydrate (HFHC) diet, suggesting selective PPARγ modulation is effective in obesity-related liver fibrosis. SR1664 did not alter weight gain, fasting insulin, or glucose levels. The degree of fibrosis was significantly reduced by SR1664 in mice on the HFHC diet, and this was accompanied by a decrease in activated hepatic stellate cells.

Reference: Biology (Basel). 2023 Sep 26;12(10):1287. https://pubmed.ncbi.nlm.nih.gov/37886997/

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.