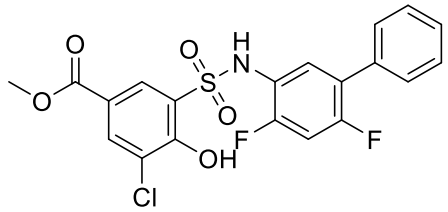
Product data sheet

MedKoo Cat#: 532734 Name: NDI-091143 CAS#: 2375840-87-0 Chemical Formula: $C_{20}H_{14}ClF_2NO_5S$ Exact Mass: 453.0249 Molecular Weight: 453.84	
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:
NDI-091143 is a novel potent inhibitor of human ATP-citrate lyase, indirectly disrupting citrate binding via an unexpected mechanism of inhibition.

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	91	200.5

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	**1 mg**	**5 mg**	**10 mg**
1 mM	2.20 mL	11.02 mL	22.03 mL
5 mM	0.44 mL	2.20 mL	4.41 mL
10 mM	0.22 mL	1.10 mL	2.20 mL
50 mM	0.04 mL	0.22 mL	0.44 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. Wei J, Leit S, Kuai J, Therrien E, Rafi S, Harwood HJ Jr, DeLaBarre B, Tong L. An allosteric mechanism for potent inhibition of human ATP-citrate lyase. Nature. 2019 Apr;568(7753):566-570. doi: 10.1038/s41586-019-1094-6. Epub 2019 Apr 3. PMID: 30944472.

In vivo study

TBD

7. Bioactivity
Biological target:

NDI-091143 is a novel potent inhibitor of human ATP-citrate lyase.

In vitro activity

Thermal shift assays shows that NDI-091143 gives rise to considerable stabilization of both full-length ACLY and the N-terminal segment. The thermal shift data are consistent with limited proteolysis experiments using full-length ACLY, in which NDI-091143 together with Mg-ATP provided the greatest protection against digestion by chymotrypsin.

In vivo activity

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TBD

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.