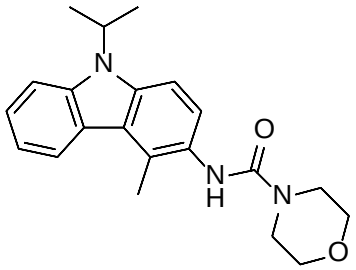
Product data sheet

MedKoo Cat#: 562517 Name: NPY5RA972 CAS: 439861-56-0 Chemical Formula: $C_{21}H_{25}N_3O_2$ Exact Mass: 351.1947 Molecular Weight: 351.45	
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:
NPY5RA972 is a neuropeptide Y Y5 antagonist.

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
TBD	TBD	TBD

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.85 mL	14.23 mL	28.45 mL
5 mM	0.57 mL	2.85 mL	5.69 mL
10 mM	0.29 mL	1.42 mL	2.85 mL
50 mM	0.06 mL	0.29 mL	0.57 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

TBD

In vivo study

1. Turnbull AV, Ellershaw L, Masters DJ, Birtles S, Boyer S, Carroll D, Clarkson P, Loxham SJ, McAulay P, Teague JL, Foote KM, Pease JE, Block MH. Selective antagonism of the NPY Y5 receptor does not have a major effect on feeding in rats. Diabetes. 2002 Aug;51(8):2441-9. doi: 10.2337/diabetes.51.8.2441. PMID: 12145156.
2. Block MH, Boyer S, Brailsford W, Brittain DR, Carroll D, Chapman S, Clarke DS, Donald CS, Foote KM, Godfrey L, Ladner A, Marsham PR, Masters DJ, Mee CD, O'Donovan MR, Pease JE, Pickup AG, Rayner JW, Roberts A, Schofield P, Suleman A, Turnbull AV. Discovery and optimization of a series of carbazole ureas as NPY5 antagonists for the treatment of obesity. J Med Chem. 2002 Aug 1;45(16):3509-23. doi: 10.1021/jm011125x. PMID: 12139462.

7. Bioactivity
Biological target:

NPY5RA-972 is an orally active, central nervous system (CNS) penetrating, potent and selective NPY Y5 receptor antagonist.

In vitro activity

TBD

Product data sheet

In vivo activity

This compound is central nervous system (CNS) penetrant, and an oral dose of 10 mg/kg NPY5RA-972 to rats produced concentrations in cerebrospinal fluid that greatly exceeded the in vitro IC(50) (inhibitory concentration 50%). Indeed, at doses to rats as low as 1 mg/kg, NPY5RA-972 inhibited feeding induced by intracerebroventricular (ICV) administration of a selective NPY Y5 agonist ([cPP(1-7),NPY(19-23),Ala(31),Aib(32),Gln(34)]-hPP).

Reference: Diabetes. 2002 Aug;51(8):2441-9. https://pubmed.ncbi.nlm.nih.gov/12145156/