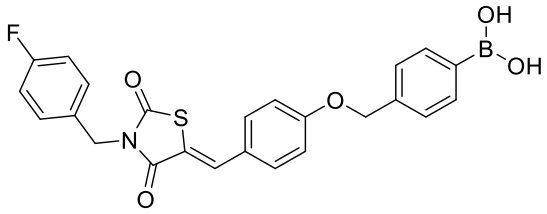
Product data sheet

MedKoo Cat#: 530383 Name: HA155 CAS: 1229652-22-5 Chemical Formula: $C_{24}H_{19}BFNO_5S$ Exact Mass: 463.1061 Molecular Weight: 463.2864	
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:
HA155, also known as Autotaxin Inhibitor IV, is a boronic acid-based compound that inhibits autotaxin (IC50 = 5.7 nM) by selectively binding to its catalytic threonine.

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	50.0	107.92
DMSO	30.0	64.75

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	**1 mg**	**5 mg**	**10 mg**
1 mM	2.16 mL	10.79 mL	21.58 mL
5 mM	0.43 mL	2.16 mL	4.32 mL
10 mM	0.22 mL	1.08 mL	2.16 mL
50 mM	0.04 mL	0.22 mL	0.43 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. Fulkerson Z, Wu T, Sunkara M, Kooi CV, Morris AJ, Smyth SS. Binding of autotaxin to integrins localizes lysophosphatidic acid production to platelets and mammalian cells. J Biol Chem. 2011 Oct 7;286(40):34654-63. doi: 10.1074/jbc.M111.276725. Epub 2011 Aug 10. PMID: 21832043; PMCID: PMC3186383.

In vivo study

1. Joncour A, Desroy N, Housseman C, Bock X, Bienvenu N, Cherel L, Labeguere V, Peixoto C, Annoot D, Lepissier L, Heiermann J, Hengeveld WJ, Pilzak G, Monjardet A, Wakselman E, Roncoroni V, Le Tallec S, Galien R, David C, Vandervoort N, Christophe T, Conrath K, Jans M, Wohlkonig A, Soror S, Steyaert J, Touitou R, Fleury D, Vercheval L, Mollat P, Triballeau N, van der Aar E, Brys R, Heckmann B. Discovery, Structure-Activity Relationship, and Binding Mode of an Imidazo[1,2-a]pyridine Series of Autotaxin Inhibitors. J Med Chem. 2017 Sep 14;60(17):7371-7392. doi: 10.1021/acs.jmedchem.7b00647. Epub 2017 Aug 18. Erratum in: J Med Chem. 2018 May 10;61(9):4270. PMID: 28731719.

7. Bioactivity
Biological target:

(E/Z)-HA155 is a potent autotaxin (ATX) type I inhibitor.

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In vitro activity

The thrombin-mediated increase in platelet-derived LPA was completely attenuated in a dose-dependent manner by the ATX inhibitor HA155 (Fig. 1A).

Reference: J Biol Chem. 2011 Oct 7;286(40):34654-63. https://pubmed.ncbi.nlm.nih.gov/21832043/

In vivo activity

Compound 40 (HA155) was also able to decrease the plasma LPA levels upon oral administration to rats.

Reference: J Med Chem. 2017 Sep 14;60(17):7371-7392. https://pubmed.ncbi.nlm.nih.gov/28731719/

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.