# **Product data sheet**



MedKoo Cat#: 562163		
Name: S32826 disodium		
CAS#: 1103672-43-0		Na <sup>+</sup> <sub>O</sub> - Na <sup>+</sup>
Chemical Formula: C <sub>21</sub> H <sub>34</sub> NNa <sub>2</sub> O <sub>4</sub> P		
Molecular Weight: 441.45		
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:

S32826 is an inhibitor of autotaxin.

## 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
Ethanol	2.4	5.44

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.27 mL	11.33 mL	22.65 mL
5 mM	0.45 mL	2.27 mL	4.53 mL
10 mM	0.23 mL	1.13 mL	2.27 mL
50 mM	0.05 mL	0.23 mL	0.45 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. Liao Y, Liu L, Yang J, Shi Z. ATX/LPA axis regulates FAK activation, cell proliferation, apoptosis, and motility in human pancreatic cancer cells. In Vitro Cell Dev Biol Anim. 2022 Apr;58(4):307-315. doi: 10.1007/s11626-022-00660-3. Epub 2022 Apr 14. PMID: 35426066.
- 2. Ferry G, Moulharat N, Pradère JP, Desos P, Try A, Genton A, Giganti A, Beucher-Gaudin M, Lonchampt M, Bertrand M, Saulnier-Blache JS, Tucker GC, Cordi A, Boutin JA. S32826, a nanomolar inhibitor of autotaxin: discovery, synthesis and applications as a pharmacological tool. J Pharmacol Exp Ther. 2008 Dec;327(3):809-19. doi: 10.1124/jpet.108.141911. Epub 2008 Aug 28. PMID: 18755937.

#### In vivo study

1. Iyer P, Lalane R 3rd, Morris C, Challa P, Vann R, Rao PV. Autotaxin-lysophosphatidic acid axis is a novel molecular target for lowering intraocular pressure. PLoS One. 2012;7(8):e42627. doi: 10.1371/journal.pone.0042627. Epub 2012 Aug 20. PMID: 22916143; PMCID: PMC3423407.

### 7. Bioactivity

Biological target:

S32826 is a potent autotaxin inhibitor, with an IC50 of 8.8 nM. S32826 inhibits LPA release from adipocytes.

In vitro activity

# Product data sheet



S32826 effectively decreased the concentration of LPA in cellular supernatant in a dose- and time-dependent manner. S32826 reduced the expression and altered the sublocalization of total focal adhesion kinase (FAK) and phosphorylated FAK (pY397 FAK) along the cell membrane, which significantly reduced cell viability and migration while increasing the proportion of apoptotic cells.

Reference: In Vitro Cell Dev Biol Anim. 2022 Apr;58(4):307-315. https://pubmed.ncbi.nlm.nih.gov/35426066/

## In vivo activity

S32826 significantly decreased intraocular pressure (IOP) in Dutch-Belted rabbits. This reduction in IOP was observed when S32826 was topically applied and intracamerally injected into the rabbits. S32826 has the potential to serve as a therapeutic agent for lowering IOP in glaucoma patients, based on its positive effects in this rabbit model.

Reference: PLoS One. 2012;7(8):e42627. https://pubmed.ncbi.nlm.nih.gov/22916143/

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.