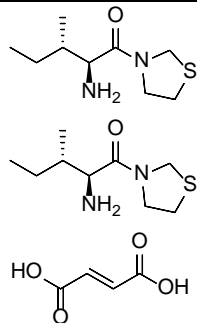


Product data sheet



MedKoo Cat#: 530415 Name: P-3298 hemifumarate CAS: 251572-86-8 (hemi-fumarate) Chemical Formula: C ₂₂ H ₄₀ N ₄ O ₆ S ₂ Molecular Weight: 520.704	
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:

P-3298, also known as P32/98, Isoleucine-thiazolidide, is a DPP-4 inhibitor potentially for the treatment of type 2 diabetes. P32/98 decreased non-fasting morning blood glucose more effectively in ZR with iGT than in ZR with mGT. Compared with study entry, P32/98 improved DNP of blood glucose in ZR with mGT and nearly normalized DNP in ZR with iGT. P32/98 significantly reduced triglycerides and non-esterified fatty acids. Intestinal growth was comparable between inhibitor- and placebo-treated fatty rats.

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	5.0	9.60
DMSO	15.0	28.81
Ethanol	1.0	1.92
PBS (pH 7.2)	10.0	19.20

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.92 mL	9.60 mL	19.20 mL
5 mM	0.38 mL	1.92 mL	3.84 mL
10 mM	0.19 mL	0.96 mL	1.92 mL
50 mM	0.04 mL	0.19 mL	0.38 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. Augstein P, Berg S, Heinke P, Altmann S, Salzsieder E, Demuth HU, Freyse EJ. Efficacy of the dipeptidyl peptidase IV inhibitor isoleucine thiazolidide (P32/98) in fatty Zucker rats with incipient and manifest impaired glucose tolerance. *Diabetes Obes Metab.* 2008 Sep;10(10):850-61. doi: 10.1111/j.1463-1326.2007.00813.x. Epub 2007 Oct 29. PMID: 17970756.
2. Wargent E, Stocker C, Augstein P, Heinke P, Meyer A, Hoffmann T, Subramanian A, Sennitt MV, Demuth HU, Arch JR, Cawthorne MA. Improvement of glucose tolerance in Zucker diabetic fatty rats by long-term treatment with the dipeptidyl peptidase inhibitor P32/98: comparison with and combination with rosiglitazone. *Diabetes Obes Metab.* 2005 Mar;7(2):170-81. doi: 10.1111/j.1463-1326.2004.00383.x. PMID: 15715890.

7. Bioactivity

Biological target:

Product data sheet



P32/98 hemifumarate is a potent inhibitor of dipeptidyl peptidase IV with a K_i value of 130 nM.

In vitro activity

TBD

In vivo activity

P32/98 decreased non-fasting morning blood glucose more effectively in ZR with iIGT than in ZR with mIGT. Compared with study entry, P32/98 improved DNP of blood glucose in ZR with mIGT and nearly normalized DNP in ZR with iIGT. An acute bolus of inhibitor reduced glucose load during oGTT in rats chronically treated with placebo or P32/98. In contrast to placebo-treated rats, rats receiving long-term treatment with P32/98 required less insulin during oGTT. This effect was larger in rats with iIGT vs. rats with mIGT.

Reference: Diabetes Obes Metab. 2008 Sep;10(10):850-61. <https://pubmed.ncbi.nlm.nih.gov/17970756/>

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.