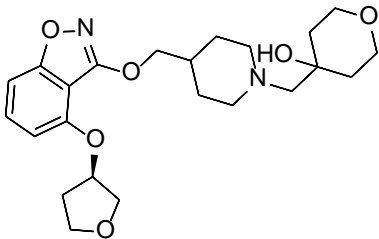


# Product data sheet



MedKoo Cat#: 525952 Name: PF-04995274 CAS#: 1331782-27-4 Chemical Formula: C <sub>23</sub> H <sub>32</sub> N <sub>2</sub> O <sub>6</sub> Exact Mass: 432.2260 Molecular Weight: 432.52	
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:

PF-04995274 is a 5-HT<sub>4</sub> receptor partial agonist. It is thought to act centrally as a pro-cognitive agent that is being developed for the treatment of Alzheimer's disease (AD).

## 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	20.0	46.20

## 4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	2.31 mL	11.56 mL	23.12 mL
5 mM	0.46 mL	2.31 mL	4.62 mL
10 mM	0.23 mL	1.16 mL	2.31 mL
50 mM	0.05 mL	0.23 mL	0.46 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. Chen BK, Mendez-David I, Luna VM, Faye C, Gardier AM, David DJ, Denny CA. Prophylactic efficacy of 5-HT<sub>4</sub>R agonists against stress. *Neuropsychopharmacology*. 2020 Feb;45(3):542-552. doi: 10.1038/s41386-019-0540-3. Epub 2019 Oct 10. PMID: 31600767; PMCID: PMC6969048.

## 7. Bioactivity

Biological target: PF-04995274 is a partial agonist of serotonin 4 receptor (5-HT<sub>4</sub>R) with EC<sub>50</sub> of 0.47 nM, 0.36 nM, 0.37 nM and 0.26 nM for human 5-HT<sub>4A/4B/4D/4E</sub>, respectively.

In vitro activity

TBD

In vivo activity

Whether PF-04995274 can be prophylactic in male 129S6/SvEv mice was evaluated. Male 129S6/SvEv mice were injected with saline or PF-04995274 (3 or 10 mg/kg) (Fig. 4a). One week later, mice were administered 3-shock CFC (contextual fear conditioning). Both

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groups of mice exhibited comparable levels of freezing during CFC training (Fig. 4b). Five days later, mice were re-exposed to the training context. PF-04995274 at 10, but not 3 mg/kg, attenuated learned fear when compared with saline administration. Stress-induced anxiety-like behavior was next quantified. In the OF, all groups of mice traveled a comparable distance (Fig. 4h). In the EPM (elevated plus maze), all groups of mice spent comparable time in the open arms (Fig. 4i) and entered into the open arms a comparable number of times (Fig. 4j). In the NSF (novelty suppressed feeding) paradigm, all groups of mice approached the pellet in a comparable amount of time (Fig. 4k, l). Finally, all mice lost a comparable amount of weight during the NSF paradigm (Fig. 4m). In summary, these data indicate that a single injection of PF-04995274 results in prophylactic efficacy by attenuating learned fear and decreasing stress-induced depressive-like behavior.

Reference: Neuropsychopharmacology. 2020 Feb;45(3):542-552. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6969048/>

*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.*