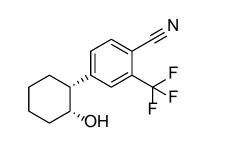
# **Product data sheet**



| MedKoo Cat#: 532464   |  |  |  |  |
|---|--|--|--|--|
| Name: PF0998425   |  |  |  |  |
| CAS: 1076225-27-8   |  |  |  |  |
| Chemical Formula: C <sub>14</sub> H <sub>14</sub> F <sub>3</sub> NO |  |  |  |  |
| Exact Mass: 269.1027  |  |  |  |  |
| Molecular Weight: 269.2672  |  |  |  |  |
| Product supplied as:  | Powder                                     |  |  |  |
| Purity (by HPLC):   | $\geq 98\%$                                |  |  |  |
| 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:

PF0998425 is a bioactive chemical.

#### 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    | 50.0            | 185.69       |

#### 4. Stock solution preparation table:

| Concentration / Solvent Volume / Mass | 1 mg    | 5 mg     | 10 mg    |
|---------------------------------------|---------|----------|----------|
| 1 mM                                  | 3.71 mL | 18.57 mL | 37.14 mL |
| 5 mM                                  | 0.74 mL | 3.71 mL  | 7.43 mL  |
| 10 mM                                 | 0.37 mL | 1.86 mL  | 3.71 mL  |
| 50 mM                                 | 0.07 mL | 0.37 mL  | 0.74 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

Li JJ, Iula DM, Nguyen MN, Hu LY, Dettling D, Johnson TR, Du DY, Shanmugasundaram V, Van Camp JA, Wang Z, Harter WG, Yue WS, Boys ML, Wade KJ, Drummond EM, Samas BM, Lefker BA, Hoge GS, Lovdahl MJ, Asbill J, Carroll M, Meade MA, Ciotti SM, Krieger-Burke T. Rational design and synthesis of 4-((1R,2R)-2-hydroxycyclohexyl)-2(trifluoromethyl)benzonitrile (PF-998425), a novel, nonsteroidal androgen receptor antagonist devoid of phototoxicity for dermatological indications. J Med Chem. 2008 Nov 13;51(21):7010-4. doi: 10.1021/jm8009316. Epub 2008 Oct 16. PMID: 18921992.

#### 7. Bioactivity

## Biological target:

PF-998425 is a potent, selective nonsteroidal androgen receptor (AR) antagonist with an IC50 of 37 nM and 43 nM in AR binding and cellular assays.

In vitro activity

TBD

In vivo activity

# **Product data sheet**



4-((1 R,2 R)-2-Hydroxycyclohexyl)-2(trifluoromethyl)benzonitrile [PF-0998425, (-)- 6a] is a novel, nonsteroidal androgen receptor antagonist for sebum control and treatment of androgenetic alopecia. It is potent, selective, and active in vivo. The compound is rapidly metabolized systemically, thereby reducing the risk of unwanted systemic side effects due to its primary pharmacology. (-)- 6a was tested negative in the 3T3 NRU assay, validating the rationale that reduction of conjugation might reduce potential phototoxicity.

Reference: J Med Chem. 2008 Nov 13;51(21):7010-4. https://pubmed.ncbi.nlm.nih.gov/18921992/

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.