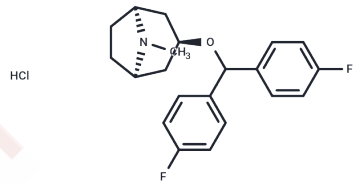
# Data Sheet (Cat.No.T39429)

TargetMol

## AHN 1-055 hydrochloride

### Chemical Properties



CAS No. : 202646-03-5

Formula: C21H24ClF2NO

Molecular Weight: 379.87

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

### Biological Description

| | |
|---|---|
| Description | AHN 1-055 hydrochloride (3α-Bis-(4-fluorophenyl) Methoxytropane hydrochloride) is an inhibitor of dopamine transporter (DAT) and dopamine uptake(IC50 = 71 nM). |
| Targets(IC50) | Dopamine Receptor |
| In vivo | In adult male Sprague Dawley rats, AHN 1-055 hydrochloride (5 mg/kg; i.v.) inhibited the uptaking of brain dopamine with an IC50 of 311.8 ng/ml. The Cmax and T1/2 are 1.48 mg/L and 7.69 h due to 1.8L/h/kg plasma clearance combined with 18.7 L/kg volumes of distribution[1]. |

### Solubility Information

| | |
|---|---|
| Solubility | H2O: 33.33 mg/mL (87.74 mM),Sonication is recommended.<br>DMSO: 50 mg/mL (131.62 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (5.26 mM),Sonication is recommended.<br>*Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.* |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 2.6325 mL | 13.1624 mL | 26.3248 mL |
| 5 mM | 0.5265 mL | 2.6325 mL | 5.265 mL |
| 10 mM | 0.2632 mL | 1.3162 mL | 2.6325 mL |
| 50 mM | 0.0526 mL | 0.2632 mL | 0.5265 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Soto PL,et al. Effects of benztropine analogs on delay discounting in rats. Psychopharmacology (Berl). 2020 Dec; 237(12):3783-3794.