# **Screening Libraries**

# Sumanirole maleate

Cat. No.: HY-70081A CAS No.: 179386-44-8 Molecular Formula: C<sub>15</sub>H<sub>17</sub>N<sub>3</sub>O<sub>5</sub> Molecular Weight: 319.31

Target: **Dopamine Receptor** 

Pathway: GPCR/G Protein; Neuronal Signaling Storage: 4°C, sealed storage, away from moisture

\* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

**Product** Data Sheet

### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 50 mg/mL (156.59 mM; Need ultrasonic) H<sub>2</sub>O: 10 mg/mL (31.32 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.1318 mL	15.6588 mL	31.3175 mL
	5 mM	0.6264 mL	3.1318 mL	6.2635 mL
	10 mM	0.3132 mL	1.5659 mL	3.1318 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: PBS Solubility: 50 mg/mL (156.59 mM); Clear solution; Need ultrasonic
- 2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (7.83 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (7.83 mM); Clear solution
- 4. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (7.83 mM); Clear solution

## **BIOLOGICAL ACTIVITY**

Description	Sumanirole maleate (U-95666E; PNU-95666E) is a highly selective D2 receptor full agonist with an ED <sub>50</sub> of about 46 nM. Sumanirole plays an important role in the research of Parkinson's disease and restless leg syndrome <sup>[1]</sup> .
IC <sub>50</sub> & Target	D <sub>2</sub> Receptor
In Vitro	Sumanirole is a highly valuable tool compound for basic research to identify neurobiological mechanisms that are based on

a dopamine D2-linked (vs. D1, D3, D4, and D5-linked) mechanism of action.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

# **CUSTOMER VALIDATION**

• Biomed Pharmacother. 2021, 111500.

See more customer validations on  $\underline{www.MedChemExpress.com}$ 

### **REFERENCES**

[1]. Arthur G. Romero, et al. Synthesis of the Selective D2 Receptor Agonist PNU-95666E from D-Phenylalanine Using a Sequential Oxidative Cyclization Strategy. J. Org. Chem. 1997, 62, 6582-6587

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

Tel: 609-228-6898

Fax: 609-228-5909

 $\hbox{E-mail: } tech@MedChemExpress.com$ 

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Page 2 of 2 www.MedChemExpress.com