# **Screening Libraries**

# **Bromperidol**

Cat. No.: HY-B0901 CAS No.: 10457-90-6 Molecular Formula:  $C_{21}H_{23}BrFNO_{2}$ 

Molecular Weight: 420.32

Target: Dopamine Receptor; Bacterial

In solvent

Pathway: GPCR/G Protein; Neuronal Signaling; Anti-infection

Storage: Powder -20°C 3 years

4°C 2 years -80°C 6 months

-20°C 1 month

**Product** Data Sheet

### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 50 mg/mL (118.96 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.3791 mL	11.8957 mL	23.7914 mL
	5 mM	0.4758 mL	2.3791 mL	4.7583 mL
	10 mM	0.2379 mL	1.1896 mL	2.3791 mL

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

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (5.95 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.95 mM); Clear solution

## **BIOLOGICAL ACTIVITY**

Description	Bromperidol (R-11333) possesses antipsychotic activity, with a high affinity for central dopamine receptors $D_2$ . Bromperidol can kill Mycobacteria in a synergistic manner with Spectinomycin <sup>[1][2]</sup> .
IC <sub>50</sub> & Target	D <sub>2</sub> Receptor
In Vivo	Bromperidol antagonises stereotyped behaviour and agitation induced by apomorphine or amphetamine, and inhibits conditioned reactions and learned intracranial self-stimulation in rats <sup>[1]</sup> .  Bromperidol antagonises apomorphine-induced emesis and inhibits the conditioned avoidance response in dogs <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **CUSTOMER VALIDATION**

- Pharmacology. 2019 May 8;104(1-2):43-50.
- Biol Pharm Bull. 2021;44(8):1140-1150.

See more customer validations on www.MedChemExpress.com

### **REFERENCES**

[1]. Benfield P, et al. Bromperidol. A preliminary review of its pharmacodynamic and pharmacokinetic properties, and therapeutic efficacy in psychoses. Drugs. 1988 Jun;35(6):670-84.

[2]. Ramón-García S, et al. Synergistic drug combinations for tuberculosis therapy identified by a novel high-throughput screen. Antimicrob Agents Chemother. 2011 Aug;55(8):3861-9.

Caution: Product has not been fully validated for medical applications. For research use only.

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