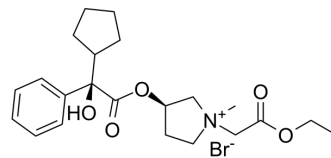


Sofpironium bromide

Cat. No.:	HY-109013
CAS No.:	1628106-94-4
Molecular Formula:	C ₂₂ H ₃₂ BrNO ₅
Molecular Weight:	470.4
Target:	mAChR
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)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (212.59 mM; Need ultrasonic)																							
	<table border="1"> <thead> <tr> <th rowspan="2">Preparing Stock Solutions</th> <th rowspan="2">Solvent Concentration</th> <th colspan="3">Mass</th> </tr> <tr> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td></td> <td>1 mM</td> <td>2.1259 mL</td> <td>10.6293 mL</td> <td>21.2585 mL</td> </tr> <tr> <td></td> <td>5 mM</td> <td>0.4252 mL</td> <td>2.1259 mL</td> <td>4.2517 mL</td> </tr> <tr> <td></td> <td>10 mM</td> <td>0.2126 mL</td> <td>1.0629 mL</td> <td>2.1259 mL</td> </tr> </tbody> </table>	Preparing Stock Solutions	Solvent Concentration	Mass			1 mg	5 mg	10 mg		1 mM	2.1259 mL	10.6293 mL	21.2585 mL		5 mM	0.4252 mL	2.1259 mL	4.2517 mL		10 mM	0.2126 mL	1.0629 mL	2.1259 mL
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	Please refer to the solubility information to select the appropriate solvent.																							
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (5.31 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (5.31 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.31 mM); Clear solution 																							

BIOLOGICAL ACTIVITY

Description	Sofpironium bromide (BBI 4000) is an anticholinergic agent used in the study of primary axillary hyperhidrosis (PAH). Sofpironium bromide reduces sweating by inhibiting M3 muscarinic receptors in eccrine glands at the application site. Sofpironium bromide also has a high affinity for the M1, M2, M4 and M5 subtypes ^[1] .
In Vitro	Sofpironium bromide is metabolized mainly through non-enzymatic hydrolysis, and also through oxidative metabolism via CYP2D6 and CYP3A4 ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Sofpironium bromide exhibits anticholinergic activity by inhibiting the contractile activity of guinea pig ileal tissue in a

concentration-dependent manner. In a rat model, Sofpironium bromide reduces footpad sweating induced by Pilocarpine (a muscarinic receptor agonist)^[1].

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

REFERENCES

[1]. Julia Paik, et al. Sofpironium Bromide: First Approval. *Drugs*. 2020 Dec;80(18):1981-1986.

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

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