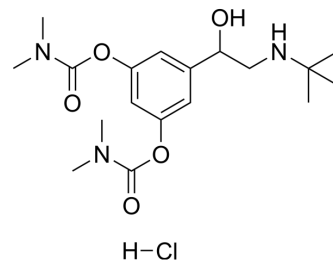


## Bambuterol hydrochloride

Cat. No.:	HY-17501A
CAS No.:	81732-46-9
Molecular Formula:	C <sub>18</sub> H <sub>30</sub> ClN <sub>3</sub> O <sub>5</sub>
Molecular Weight:	403.9
Target:	Adrenergic 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)



### SOLVENT & SOLUBILITY

In Vitro	DMSO : 120 mg/mL (297.10 mM; Need ultrasonic) H <sub>2</sub> O : 2.4 mg/mL (5.94 mM; Need ultrasonic)				
	Preparing Stock Solutions	<div>Solvent Concentration</div> <div>Mass</div>	1 mg	5 mg	10 mg
		1 mM	2.4759 mL	12.3793 mL	24.7586 mL
		5 mM	0.4952 mL	2.4759 mL	4.9517 mL
		10 mM	0.2476 mL	1.2379 mL	2.4759 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 (123.79 mM); Clear solution; Need ultrasonic				
	2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 3 mg/mL (7.43 mM); Clear solution				
	3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 3 mg/mL (7.43 mM); Clear solution				
	4. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 3 mg/mL (7.43 mM); Clear solution				

### BIOLOGICAL ACTIVITY

Description	Bambuterol hydrochloride ((±)-Bambuterol hydrochloride; KWD-2183 hydrochloride) is a long acting beta-adrenoceptor agonist (LABA) used in the treatment of asthma; it also is a proagent of terbutaline.
IC <sub>50</sub> & Target	beta-adrenoceptor
In Vitro	Bambuterol ((±)-Bambuterol hydrochloride; KWD-2183 hydrochloride) is contraindicated in pregnancy and in people with

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seriously impaired liver function. It can be used by people with renal impairment, but dose adjustments are necessary. The adverse effect profile of bambuterol is similar to that of salbutamol, and may include fatigue, nausea, palpitations, headache, dizziness and tremor.

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

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## CUSTOMER VALIDATION

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- Research Square Preprint. 2022 Feb.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

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[1]. Bambuterol, From Wikipedia

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

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