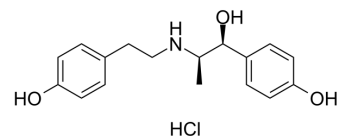


## Ritodrine hydrochloride

Cat. No.:	HY-B0452
CAS No.:	23239-51-2
Molecular Formula:	C <sub>17</sub> H <sub>22</sub> ClNO <sub>3</sub>
Molecular Weight:	323.81
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 (370.59 mM; Need ultrasonic)  
 H<sub>2</sub>O : ≥ 100 mg/mL (308.82 mM)  
 \* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
	1 mM		3.0882 mL	15.4412 mL	30.8823 mL
	5 mM		0.6176 mL	3.0882 mL	6.1765 mL
	10 mM		0.3088 mL	1.5441 mL	3.0882 mL

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

#### In Vivo

- Add each solvent one by one: PBS  
Solubility: 50 mg/mL (154.41 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 1.71 mg/mL (5.28 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 1.71 mg/mL (5.28 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 1.71 mg/mL (5.28 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Ritodrine (DU21220) hydrochloride is a β-adrenergic agonist, also an effective smooth muscle and uterine relaxant. Ritodrine hydrochloride prolongs contraction interval, can be used for researching arrest premature labor<sup>[1][2][3]</sup>.

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## CUSTOMER VALIDATION

- Comput Struct Biotechnol J. 2023 Jul 7, 21, 3490-3502.
- J Pharmaceut Biomed. 2020, 113870.

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

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## REFERENCES

- [1]. Spellacy WN, et al. Treatment of premature labor with ritodrine: a randomized controlled study. *Obstet Gynecol.* 1979 Aug;54(2):220-3.
- [2]. Canadian Preterm Labor Investigators Group. Treatment of preterm labor with the beta-adrenergic agonist ritodrine. *N Engl J Med.* 1992 Jul 30;327(5):308-12.
- [3]. Li, X., Y. Zhang, and Z. Shi, Ritodrine in the treatment of preterm labour: a meta-analysis. *Indian J Med Res,* 2005. 121(2): p. 120-7.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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