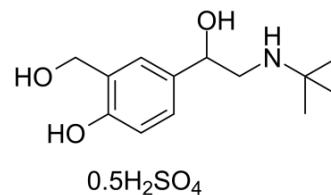


## Salbutamol hemisulfate

<b>Cat. No.:</b>	HY-B0436		
<b>CAS No.:</b>	51022-70-9		
<b>Molecular Formula:</b>	C <sub>13</sub> H <sub>22</sub> NO <sub>5</sub> S <sub>0.5</sub>		
<b>Molecular Weight:</b>	288.14		
<b>Target:</b>	Adrenergic Receptor; Autophagy; Autophagy		
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling; Autophagy		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : 100 mg/mL (347.05 mM; Need ultrasonic)  
 DMSO : 2 mg/mL (6.94 mM; Need ultrasonic)

	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	3.4705 mL	17.3527 mL	34.7053 mL
	5 mM	0.6941 mL	3.4705 mL	6.9411 mL
	10 mM	0.3471 mL	1.7353 mL	3.4705 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Salbutamol Hemisulfate (Albuterol hemisulfate) is a short-acting β<sub>2</sub> adrenergic receptor agonist. Target: β<sub>2</sub> Adrenergic Receptor. Salbutamol Hemisulfate (Albuterol hemisulfate) is a short-acting, selective beta<sub>2</sub>-adrenergic receptor agonist used in the treatment of asthma and COPD. All the effects of R,S-salbutamol on guinea-pig skeletal muscles are due to the activity of the R-enantiomer. Thus there is a common enantiomeric profile for the skeletal muscle and bronchorelaxant activity of the compound [1]. Short-term Salbutamol intake did appear to improve performance during intense submaximal exercise with concomitant increase in substrate availability and utilization, but the exact mechanisms involved need further investigation [2]. Short-term administration of salbutamol increases voluntary muscle strength in man. However, the magnitude and duration of this effect vary between muscle groups. This study implies that the beta 2-adrenoceptor agonists may be of therapeutic potential in altering skeletal muscle function in humans [3].

### REFERENCES

[1]. Prior, C., M.B. Leonard, and J.R. McCullough, Effects of the enantiomers of R,S-salbutamol on incompletely fused tetanic contractions of slow- and fast-twitch skeletal

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muscles of the guinea-pig. Br J Pharmacol, 1998. 123(3): p. 558-64.

[2]. Collomp, K., et al., Effects of short-term oral salbutamol administration on exercise endurance and metabolism. J Appl Physiol (1985), 2000. 89(2): p. 430-6.

[3]. Martineau, L., et al., Salbutamol, a beta 2-adrenoceptor agonist, increases skeletal muscle strength in young men. Clin Sci (Lond), 1992. 83(5): p. 615-21.

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

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