



# SZABO SCANDIC

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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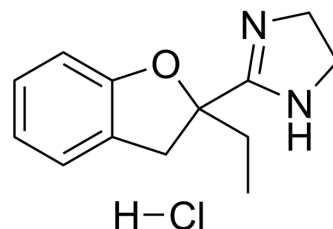
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## Efaroxan hydrochloride

<b>Cat. No.:</b>	HY-B1416A
<b>CAS No.:</b>	89197-00-2
<b>Molecular Formula:</b>	C <sub>13</sub> H <sub>17</sub> ClN <sub>2</sub> O
<b>Molecular Weight:</b>	252.74
<b>Target:</b>	Adrenergic Receptor; Imidazoline Receptor
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling
<b>Storage:</b>	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 50 mg/mL (197.83 mM; ultrasonic and warming and heat to 60°C)					
	<b>Preparing Stock Solutions</b>	<b>Solvent</b>	<b>Mass</b>	<b>1 mg</b>	<b>5 mg</b>	<b>10 mg</b>
		<b>Concentration</b>				
		<b>1 mM</b>		3.9566 mL	19.7832 mL	39.5664 mL
		<b>5 mM</b>		0.7913 mL	3.9566 mL	7.9133 mL
	<b>10 mM</b>		0.3957 mL	1.9783 mL	3.9566 mL	
Please refer to the solubility information to select the appropriate solvent.						
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 2.5 mg/mL (9.89 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (9.89 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.5 mg/mL (9.89 mM); Clear solution</li> </ol>					

### BIOLOGICAL ACTIVITY

<b>Description</b>	Efaroxan hydrochloride is a potent, selective and orally active α <sub>2</sub> -adrenoceptor antagonist, with antidiabetic activity. Efaroxan hydrochloride is a selective I1-Imidazoline receptor antagonist. Efaroxan hydrochloride can be used for the research of cardiovascular disease <sup>[1][2][3]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	α adrenergic receptor
<b>In Vitro</b>	Efaroxan hydrochloride binds to I1-imidazoline and α <sub>2</sub> -adrenergic receptors in bovine rostral ventrolateral medulla membranes, with K <sub>s</sub> of 0.15 nM and 5.6 nM, respectively <sup>[1]</sup> MCE has not independently confirmed the accuracy of these methods. They are for reference only.

**In Vivo**

Efaroxan hydrochloride increases plasma insulin levels in both conscious fed and fasted rats without greatly affecting plasma glucose levels<sup>[3]</sup>.

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Animal Model:	Male Sprague-Dawley rats (weight range 250-300g) <sup>[3]</sup>
Dosage:	1 mg/kg, 5 mg/kg
Administration:	Oral administration
Result:	Produced a significant increase in plasma insulin levels of starved rats 15 and 30 min after treatment.

**REFERENCES**

- [1]. T L Berridge, et al. Selectivity profile of the alpha 2-adrenoceptor antagonist efaroxan in relation to plasma glucose and insulin levels in the rat. Eur J Pharmacol. 1992 Mar 24;213(2):205-12.
- [2]. A O Abdel-Zaher, et al. The potential antidiabetic activity of some alpha-2 adrenoceptor antagonists. Pharmacol Res. 2001 Nov;44(5):397-409.
- [3]. T L Berridge, et al. Comparison of the effects of efaroxan and glibenclamide on plasma glucose and insulin levels in rats. Eur J Pharmacol. 1992 Mar 24;213(2):213-8.
- [4]. Berridge TL, et al. Selectivity profile of the alpha 2-adrenoceptor antagonist efaroxan in relation to plasma glucose and insulin levels in the rat. Eur J Pharmacol. 1992 Mar 24;213(2):205-12.

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

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