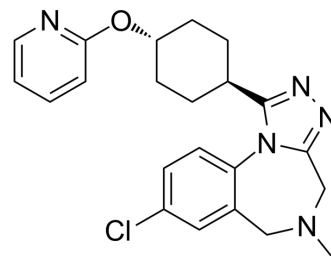


Balovaptan

Cat. No.:	HY-109024		
CAS No.:	1228088-30-9		
Molecular Formula:	C ₂₂ H ₂₄ ClN ₅ O		
Molecular Weight:	409.91		
Target:	Vasopressin Receptor		
Pathway:	GPCR/G Protein		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (121.98 mM; ultrasonic and warming and heat to 60°C)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.4396 mL	12.1978 mL	24.3956 mL
		5 mM	0.4879 mL	2.4396 mL	4.8791 mL
10 mM		0.2440 mL	1.2198 mL	2.4396 mL	
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 (6.10 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (6.10 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.10 mM); Clear solution 				

BIOLOGICAL ACTIVITY

Description	Balovaptan (RG7314) is an orally available, selective brain-penetrant vasopressin 1a (hV1a) receptor antagonist, with K _i s of 1 and 39 nM for human (hV1a) and mouse (mV1a) receptors, and is used for the research of autism.
IC₅₀ & Target	Ki: 1 nM (hV1a), 39 nM (mV1a) ^[1]
In Vitro	Balovaptan (RG7314) shows >30000-fold selectivity for hV1a over hV2 receptors, 9891-fold selectivity over hOTR (human oxytocin receptor) ^[1] .

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

REFERENCES

[1]. Ratni H, et al. Discovery of highly selective brain-penetrant vasopressin 1a antagonists for the potential treatment of autism via a chemogenomic and scaffold hopping approach. J Med Chem. 2015 Mar 12;58(5):2275-89.

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

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