

Product Name:	Tolvaptan
Product Number:	T125
CAS Number:	150683-30-0
Molecular Formula:	$C_{26}H_{25}ClN_2O_3$
Molecular Weight:	448.94
Form:	Powder
Appearance:	Powder
Solubility:	Soluble in methanol and DMSO. Practically insoluble in water.
Source:	Synthetic
Storage Conditions:	2-8C
Description:	<p>Tolvaptan is a non-peptide aquaretic agent that functions as a selective, competitive vasopressin receptor 2 (v2) antagonist. Aquaretic agents are being studied for water-retaining disorders like congestive heart failure and live cirrhosis.</p> <p>Tolvaptan has been shown to inhibit the development of polycystic kidney disease in several animal models.</p>
Mechanism of Action:	Tolvaptan is a selective, competitive vasopressin receptor 2 (v2) antagonist, 29 times for selective than the vasopressin receptor V1a. It is a derivative of OPC-31260.
References:	<p>Jalal GK, Hamad B, Yasothan U and Kirkpatrick P (2009) Tolvaptan. Nat. Rev. Drug Disc. 8:611-612</p> <p>Reif GA et al (2011) Tolvaptan inhibits ERK-dependent cell proliferation, Cl- secretion, and in vitro cyst growth of human ADPKD cells stimulated by vasopressin. Am J Physiol Renal Physiol. 301(5):F1005-13</p> <p>Schrier RW et al (2006) Tolvaptan, a selective oral vasopressin V2 receptor antagonist, for hyponatremia. N. Eng. J. Med. 355:2099-2112</p>