

Product Name	: Desmopressin
Synonyms	: DDAVP; Desmopressin Acetate
Cat No.	: M19788
CAS Number	: 16679-58-6
Molecular Formula	: C ₄₆ H ₆₄ N ₁₄ O ₁₂ S ₂
Formula Weight	: 1069.22
Chemical Name	: (S)-1-((4R,7S,10S,13S,16S)-7-(2-amino-2-oxoethyl)-10-(3-amino-3-oxopropyl)-13-benzyl-16-(4-hydroxybenzyl)-6,9,12,15,18-penta-oxo-12-dithia-5,8,11,14,17-pentaazacycloicosane-4-carbonyl)-N-((R)-1-((2-amino-2-oxoethyl)amino)-5-guanidino-1-oxopentan-2-yl)pyrrolidine-2-carboxamide
Description	Desmopressin (DDAVP) is the synthetic analogue of the antidiuretic hormone arginine vasopressin. Vasopressin Receptor The antidiuretic properties of desmopressin have led to its use in polyuric conditions including primary nocturnal enuresis, nocturia and diabetes insipidus. Desmopressin works by limiting the amount of water that is eliminated in the urine. Desmopressin binds to V2 receptors in renal collecting ducts increasing water reabsorption. It also stimulates release of von Willebrand factor from endothelial cells by acting on the V2 receptor.
Pathway	: GPCR/G Protein
Target	: Vasopressin Receptor
Receptor	: Vasopressin receptor 1; vasopressin receptor 1a; Vasopressin receptor 2
Solubility	: DMSO: 10mM
SMILES	: <chem>NC(=O)CC[C@H]1NC(=O)[C@H](Cc2ccccc2)NC(=O)[C@H](Cc2ccc(O)cc2)NC(=O)CCSSC[C@H](NC(=O)[C@H](CC(N)=O)NC1=O)C(=O)N1CCC[C@H]1C(=O)N[C@H](CCCNC(N)=N)C(=O)NCC(N)=O</chem>
Storage	: (-20°C)
Stability	: ≥ 2 years
Reference	:

1. Walle J V, Stockner M, Raes A et al. Desmopressin 30 Years in Clinical Use: A Safety Review[J]. Current Drug Safety 2007 2(3):-.