

Product Name : Desmopressin acetate

Synonyms : DDAVP

Cat No. : M19931

CAS Number : 62288-83-9

Molecular Formula : C₄₈H₆₈N₁₄O₁₄S₂

Formula Weight : 1129.26

Chemical Name : —

Description : Desmopressin is the synthetic analog 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 the 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: 10 mM; Water: 50 mg/mL; Ethanol: Soluble

SMILES : CC(=O)O.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

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1.Kaufmann JE et al. Desmopressin (DDAVP) induces NO production in human endothelial cells via V2 receptor- and cAMP-mediated signaling. J Thromb Haemost. 2003 Apr; 1(4):821-8.