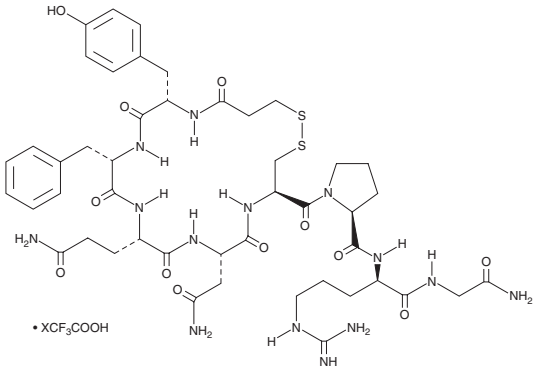
PRODUCT INFORMATION

Desmopressin (trifluoroacetate salt)

Item No. 17348



Formal Name:	N-(3-mercapto-1-oxopropyl)-L-tyrosyl-L-phenylalanyl-L-glutaminyl-L-asparaginyl-L-cysteinyl-L-prolyl-D-arginyl-glycinamide, cyclic (1→5)-disulfide, trifluoroacetate salt
Synonyms:	Adiuretin, DDAVP
MF:	$C_{46}H_{64}N_{14}O_{12}S_2 \bullet XCF_3COOH$
FW:	1,069.2
Purity:	≥95%
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Desmopressin (trifluoroacetate salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the desmopressin (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Desmopressin (trifluoroacetate salt) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of desmopressin (trifluoroacetate salt) in these solvents is approximately 5 and 1 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of desmopressin (trifluoroacetate salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of desmopressin (trifluoroacetate salt) in PBS (pH 7.2) is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Desmopressin is a synthetic version of the endogenous antidiuretic hormone arginine vasopressin (AVP). Compared to AVP, the first amino acid of desmopressin has been deaminated, and the arginine at the eighth position is in the dextrorotatory rather than the levorotatory form. Desmopressin acts as an agonist at human vasopressin V_{1a}, V_{1b}, and V_2 receptors with K_i values of 62.4, 5.8, and 23.3 nM, respectively.[1]

Reference

1. Cheng, L.L., Stoev, S., Manning, M., *et al.* Design of potent and selective agonists for the human vasopressin V_{1b} receptor based on modifications of [deamino-cys[1]]arginine vasopressin at position 4. *J. Med. Chem.* **47(9)**, 2375-2388 (2004).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM