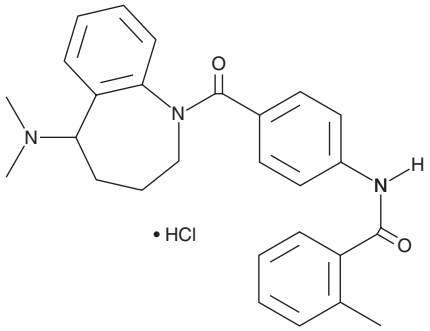
PRODUCT INFORMATION

Mozavaptan (hydrochloride)

Item No. 16664

CAS Registry No.: 138470-70-9
Formal Name: N-[4-[[5-(dimethylamino)-2,3,4,5-tetrahydro-1H-1-benzazepin-1-yl]carbonyl]phenyl]-2-methyl-benzamide, monohydrochloride
Synonym: OPC 31260
MF: $C_{27}H_{29}N_3O_2$ • HCl
FW: 464.0
Purity: ≥98%
UV/Vis.: λ_{max}: 288 nm
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

Mozavaptan (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the mozavaptan (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Mozavaptan (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of mozavaptan (hydrochloride) is approximately 25 mg/ml in ethanol and approximately 30 mg/ml in DMSO and DMF.

Mozavaptan (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, mozavaptan (hydrochloride) should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Mozavaptan (hydrochloride) has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Mozavaptan is an orally bioavailable antagonist of vasopressin V_2 receptors (K_i = 9.42 nM in HeLa cells expressing the human receptor).[1,2] It is selective for vasopressin V_2 over V_1 receptors (IC_{50}s = 14 and 1,200 nM, respectively) in radioligand binding assays using rat kidney and rat liver membranes that endogenously express high levels of vasopressin V_2 and V_1 receptors, respectively.[1] Mozavaptan (10-30 mg/kg, p.o.) increases urine volume and decreases urine osmolality, indicating aquaresis, in conscious rats. It reduces decreases in urine flow and increases in urine osmolality induced by arginine vasopressin (AVP; Item No. 24154) in anesthetized rats when administered intravenously at doses ranging from 10 to 100 µg/kg.

References

1. Yamamura, Y., Ogawa, H., Yamashita, H., *et al.* Characterization of a novel aquaretic agent, OPC-31260, as an orally effective, nonpeptide vasopressin V2 receptor antagonist. *Br. J. Pharmacol.* **105(4)**, 787-791 (1992).
2. Nakamura, S., Itoh, S., Fujiki, H., *et al.* Binding affinities of mozavaptan hydrochloride (OPC-31260) for vasopressin receptors. *Pharmacol. Ther.* **34(7)**, 827-834 (2006).

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