

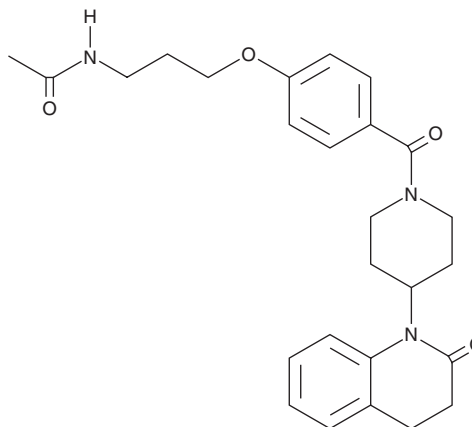
PRODUCT INFORMATION



OPC 21268

Item No. 27226

CAS Registry No.: 131631-89-5
Formal Name: N-[3-[4-[[4-(3,4-dihydro-2-oxo-1(2H)-quinolinyl)-1-piperidinyl]carbonyl]phenoxy]propyl]-acetamide
MF: C₂₆H₃₁N₃O₄
FW: 449.5
Purity: ≥98%
UV/Vis.: λ_{max}: 249 nm
Supplied as: A 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

OPC 21268 is supplied as a solid. A stock solution may be made by dissolving the OPC 21268 in the solvent of choice, which should be purged with an inert gas. OPC 21268 is soluble in the organic solvent DMSO at a concentration of approximately 200 µg/ml. OPC 21268 is also slightly soluble in ethanol.

Description

OPC 21268 is a nonpeptide antagonist of vasopressin V₁ receptors (IC₅₀ = 0.4 µM in rat liver membranes).¹ It is selective for V₁ over V₂ receptors (IC₅₀ = >100 µM in kidney membranes). It is also selective for rat over human V₁ receptors (K_is = 25 and 8,800 nM, respectively), which can be partially attributed to the alanine residue at position 337 of the rat sequence, instead of a glycine residue in the human sequence, with differences at positions 224, 310, and 324 also contributing. OPC 21268 (0.03-1 mg/kg, i.v.) inhibits pressor responses induced by arginine vasopressin (argipressin; Item No. 24154) in pithed rats and arginine vasopressin-induced vasoconstriction in conscious rats (ID₅₀ = 2 mg/kg).² It induces hypotension in aged spontaneously hypertensive rats (SHRs) and stroke-prone SHRs when administered at a dose of 3 mg/kg.³

References

1. Thibonnier, M., Coles, P., Conarty, D.M., *et al.* A molecular model of agonist and nonpeptide antagonist binding to the human V₁ vascular vasopressin receptor. *J. Pharmacol. Exp. Ther.* **4(1)**, 195-203 (2000).
2. Yamamura, Y., Ogawa, H., Chihara, T., *et al.* OPC-21268, an orally effective, nonpeptide vasopressin V₁ receptor antagonist. *Science* **252(5005)**, 572-574 (1991).
3. Yamada, Y., Yamamura, Y., Chihara, T., *et al.* OPC-21268, a vasopressin V₁ antagonist, produces hypotension in spontaneously hypertensive rats. *Hypertension* **23(2)**, 200-204 (1994).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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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