

Catalog # 10-1248 Ouabain

CAS# 11018-89-6

 $3-[(6-Deoxy-\alpha-L-mannopyranosyl)oxy]-1,5,11\alpha,14,19-pentahydoxycard-20(22)-enolide octahydrate Lot # X101251$

Selective inhibitor of Na⁺ K⁺-ATPase isolated from *Strophanthus gratus*¹. Endogenous ouabain is found in human circulation². Displays cardiotonic and diuretic activity. May be used to induce hypertensive rat model³. Cell permeable and active *in vivo*.

- 1) Silva et al. (2012), New insights into the regulation of Na+,K(+)-ATPase by ouabain; Int. Rev. Cell. Mol. Biol., **294** 99
- 2) Dvela et al. (2012), Endogenous ouabain regulates cell viability; Am. J. Physiol. Cell, Physiol., 302 C442
- 3) Zhang et al. (2009), Low-dose ouabain constricts small arteries from ouabain-hypertensive rats: implications for sustained elevation of vascular resistance; Curr. Opin. Cell Biol., **297** H1140

PHYSICAL DATA

Molecular Weight: 728.78

Molecular Formula: $C_{29}H_{44}O_{12} \cdot 8H_2O$ Purity: 99% by TLC

NMR: (Conforms)

Solubility: DMSO (up to 50 mg/ml) or Water (up to 10 mg/ml)

Physical Description: White solid

Storage and Stability: Store as supplied at -20°C for up to 2 years from the date of purchase. Protect from exposure to

moisture. Solutions in DMSO or water may be stored at -20°C for up to 3 months

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