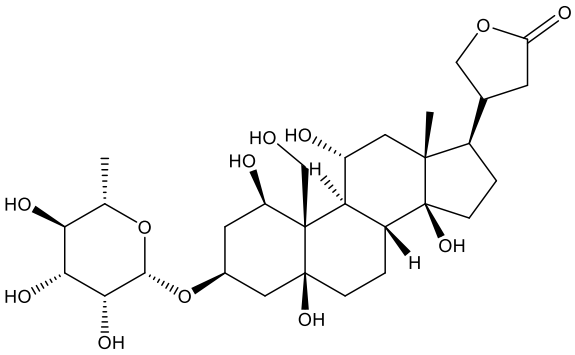
Catalog # 10-3125

Dihydroouabain

CAS# 1183-35-3

3-[(6-Deoxyhexopyranosyl)oxy]-1,5,11,14,19-pentahydroxycardanolide

Lot # S107103



Dihydroouabain (DHO) has been identified as an endogenous ouabain-like effector of sodium-potassium ATPase in mouse[1] and human[2] adrenal cells. Micromolar to millimolar concentrations of DHO are known to inhibit Na/K pump activity[3] and nanomolar concentrations stimulate Na/K pump activity in an isoform-specific manner[4].

1) Qazzaz *et al*. (2000), *Secretion of a lactone-hydrogenated ouabain-like effector of sodium, potassium-adenosine triphosphatase activity by adrenal cells*; Endocrinology, **141** 3200
2) El-Masri *et al*. (2002), *Human adrenal cells in culture produce both ouabain-like and dihydroouabain-like factors*; Clin. Chem, **48** 1720
3) Bielen *et al*. (1992), *The kinetics of the inhibition by dihydroouabain of the sodium pump current in single rabbit cardiac Purkinje cells*; Naunyn Schmiedbergs Arch. Pharmacol., **345** 100
4) Gao *et al*. (2002), *Isoform-specific stimulation of cardiac Na/K pumps by nanomolar concentrations of glycosides*; J. Gen. Physiol., **119** 297

PHYSICAL DATA

Molecular Weight:	586.68
Molecular Formula:	$C_{29}H_{46}O_{12}$
Purity:	>95% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (30 mg/ml) or Ethanol (30 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 ethanol may be stored at -20°C for up to 3 months

Focus Biomolecules LLC 400 Davis Drive, Suite 600 Plymouth Meeting PA 19462

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