

Product Data Sheet

Product Name: Ouabain-d3

Cat. No.: GC91439

Chemical Properties

Cas. No.

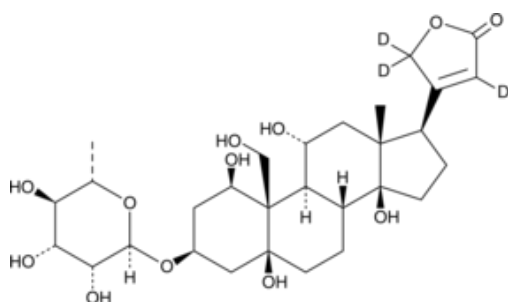
Formula $C_{29}H_{41}D_3O_{12}$ M.Wt 587.7

Solubility Methanol: Slightly soluble, Water: Slightly soluble Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

Ouabain-d3 is intended for use as an internal standard for the quantification of ouabain by GC- or LC-MS. Ouabain is a cardiac glycoside that has been found in *S. gratus* and has diverse biological activities.^{1,2,3,4,5,6,7} It inhibits the Na⁺/K⁺-ATPase isoforms $\alpha 1\beta 1$ and $\alpha 2\beta 1$ and human-ether-a-go-go (hERG), also known as Kv11.1 (IC₅₀s = 97, 90, and 15.2 nM, respectively).^{2,3} Ouabain reduces the proliferation of PC3 prostate cancer and U937 lymphoma cells (EC₅₀s = 210 and 94 nM, respectively).⁴ It inhibits the cytopathic effect of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in infected Vero cells (IC₅₀ = 5 Ouabain (~8 µg/animal) increases systolic blood pressure in normotensive rats.⁶ It has been used to induce ventricular arrhythmias in vivo.⁷ Formulations containing ouabain have been used in the treatment of atrial fibrillation, atrial flutter, and heart failure.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA