Product Name: Digoxin  
Catalog No.: 4583  
Batch No.: 3  
CAS Number: 20830-75-5  
EC Number: 244-068-1  
IUPAC Name: 4-[(3S,5R,8R,9S,10S,12R,13S,14S)-3-[(2S,4S,5R,6R)-5-[(2S,4S,5R,6R)-5-[(2S,4S,5R,6R)-5-[(2S,4S,5R,6R)-4,5-Dihydroxy-6-methyl-oxan-2-yl]oxy-4-hydroxy-6-methyl-oxan-2-yl]oxy-4-hydroxy-6-methyl-oxan-2-yl]oxy-12,14-dihydroxy-10,13-dimethyl-1,2,3,4,5,6,7,8,9,11,12,15,16,17-tetradecahydrocyclopenta[a]phenanthren-17-yl]-5H-furan-2-one

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₄₁H₆₄O₁₄
Batch Molecular Weight: 780.94
Physical Appearance: White solid
Solubility: DMSO to 100 mM
Storage: Store at RT

2. ANALYTICAL DATA

HPLC: Shows 98.2% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Optical Rotation: [α]D = +12.3 (Concentration = 2, Solvent = Pyridine)
Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 63.06  8.26
Found 63.12  8.37
**Product Name:** Digoxin  
**Catalog No.:** 4583  
**Batch No.:** 3

**CAS Number:** 20830-75-5  
**EC Number:** 244-068-1

**IUPAC Name:** 
4-[(3S,5R,8R,9S,10S,12R,13S,14S)-3-[(2S,4S,5R,6R)-5-[(2S,4S,5R,6R)-5-[(2S,4S,5R,6R)-4,5-Dihydroxy-6-methylxan-2-yl]oxy-4-hydroxy-6-methylxan-2-yl]oxy-4-hydroxy-6-methylxan-2-yl]oxy-12,14-dihydroxy-10,13-dimethyl-1,2,3,4,5,6,7,8,9,11,12,15,16,17-tetradecahydrocyclopenta[a]phenanthren-17-yl]-5H-furan-2-one

**Description:**  
Inhibits membrane-bound α-subunits of the Na⁺/K⁺ ATPase pump in myocytes. Increases RGS2 protein levels in primary vascular smooth muscle cells through an Na⁺/K⁺ ATPase pump-dependent mechanism.

**Physical and Chemical Properties:**  
**Batch Molecular Formula:** C₄₁H₆₄O₁₄  
**Batch Molecular Weight:** 780.94  
**Physical Appearance:** White solid

**Minimum Purity:** >98%

**Storage:** Store at RT

**Solubility & Usage Info:**  
DMSO to 100 mM

**Stability and Solubility Advice:**  
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**

