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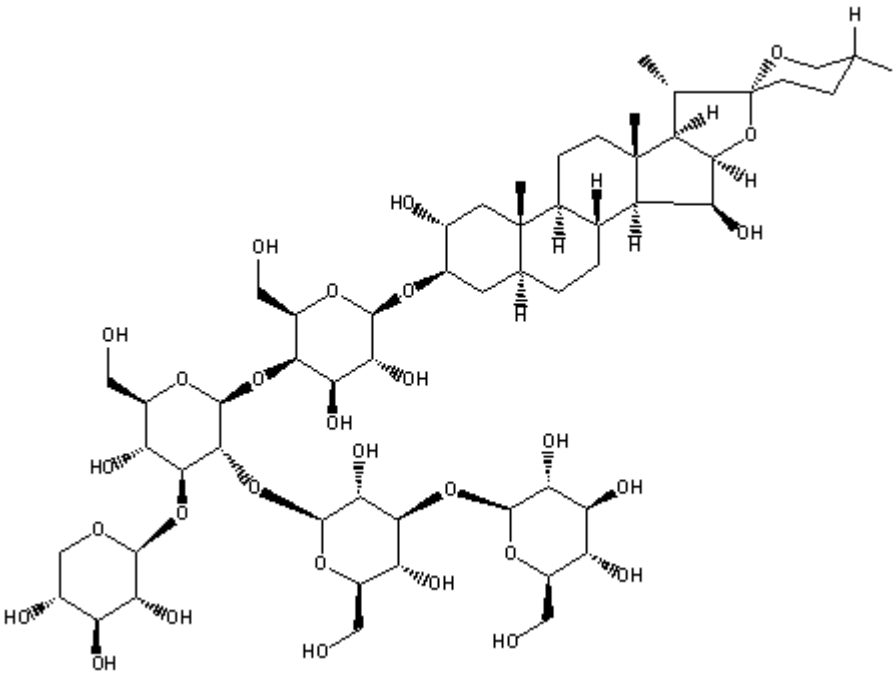
コスモ・バイオ株式会社

formerly ICN Biomedicals, Inc EMPOWERED DISCOVERY

Catalog Number: 101562, 159480

# Digitonin

**Structure:**



**Molecular Formula:** $C_{56}H_{92}O_{29}$

**Formula Weight:** 1229.33

**CAS** # : 11024-24-1

**Synonym:** Digitin

**Physical Description:** White crystalline powder

**Aggregation Number:** 60

**Source:** The seeds of *Digitalis purpurea L., Scrophulariaceae*

**Description:** A non-ionic detergent. It permeabilizes plasma membranes of eukaryotic cells by complexing with membrane cholesterol and other unconjugated β-hydroxysterols.

**Solubility:**

*Digitonin*, #101562
1 gram dissolves in 57 ml of absolute alcohol
1 gram dissolves in 220 ml of 95% alcohol
Insoluble in water: forms a soapy suspension

*Digitonin, water soluble,* #159480
1 gram dissolves in 57 ml of absolute alcohol
1 gram dissolves in 95% alcohol
20 mg in 10 ml water yields a white, cloudy and soapy solution (see below).

Solubilizing in water: Soluble in boiling water (1g/10 ml). Heat for 15 minutes @ 98 ° C. Cool and place @ 4 ° C for 3 hrs and filter off any precipitate.

**Typical Uses:**

- Cholesterol Determination[1, 16]
- Use of digitonin-permeabilized adipocytes for cAMP studies.[10]
- Solubilization of membrane proteins.[4, 11]
- The water soluble form can be used for the isolation of mitotic chromosomes.[3]

**Availability:**

| Catalog Number | Description | Size |
|---|---|---|
| 101562 | Digitonin | 250 mg<br>500 mg<br>1 g |
| 159480 | Digitonin, water soluble | 200 mg<br>500 mg<br>1 g |

**References:**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