



Certificate of Analysis

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Product Name: Carbenoxolone disodium Catalog No.: 3096 Batch No.: 5

CAS Number: 7421-40-1 EC Number: 231-044-0

IUPAC Name: (3β,20β)-3-(3-Carboxy-1-oxopropoxy)-11-oxoolean-12-en-29-oic acid disodium

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{34}H_{48}Na_2O_7.1\frac{1}{2}H_2O$

Batch Molecular Weight: 641.74 **Physical Appearance:** White solid

Solubility: water to 100 mM Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.0% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 63.63 8.01 Found 63.32 8.11

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Product Information

Print Date: Aug 26th 2020

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CAS Number: 7421-40-1 EC Number: 231-044-0

IUPAC Name: $(3\beta,20\beta)$ -3-(3-Carboxy-1-oxopropoxy)-11-oxoolean-12-en-29-oic acid disodium

Description:

Glucocorticoid that inhibits 11β -hydroxysteroid dehydrogenase (11-HSD) and blocks gap junction communication.

Physical and Chemical Properties:

Batch Molecular Formula: C₃₄H₄₈Na₂O₇.1½H₂O

Batch Molecular Weight: 641.74 Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:

Storage: Store at +4°C

Solubility & Usage Info:

water 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:

Sagar and Larson (2006) Carbenoxolone inhibits junctional trasnfer and upregulates connexin43 expression by a protein kinase A-dependent pathway. J.Cell.Biochem. **98** 1543. PMID: 16552723.

Jellinck *et al* (1993) Differential inhibition of 11 beta-hydroxysteroid dehydrogenase by carbenoxolone in rat brain regions and peripheral tissues. J.Steroid Biochem.Mol.Biol. **46** 209. PMID: 8664169.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use