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Certificate of Analysis

Print Date: May 18th 2012

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Product Name: Pristimerin

Catalog No.: 3731 Batch No.: 1

CAS Number: **IUPAC Name:**

(9β,13α,14β,20α)-3-Hydroxy-9,13-dimethyl-2-oxo-24,25,26-trinoroleana-1(10),3,5,7-tetraen-29-oic acid methyl

1. PHYSICAL AND CHEMICAL PROPERTIES

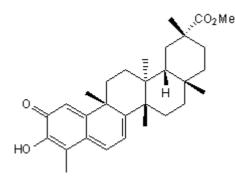
1258-84-0

ester

Batch Molecular Formula:			
Batch Molecular Weight:			
Physical Appearance:			
Solubility:			

 $C_{30}H_{40}O_4$.^{1/2}H₂O 473.65 orange solid DMSO to 25 mM ethanol to 10 mM Store at -20°C

Storage: **Batch Molecular Structure:**



2. ANALYTICAL DATA

HPLC: ¹H NMR: Mass Spectrum: **Optical Rotation: Microanalysis:**

Shows 100% purity Consistent with structure Consistent with structure $[\alpha]_{D}$ = -167 (Concentration = 1, Solvent = Chloroform) Carbon Hydrogen Nitrogen

Theoretical	76.07	8.72
Found	76.38	8.94

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

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TOCRIS b i o s c i e n c e

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Product Name: Pristimerin

Catalog No.: 3731 Batch No.: 1

CAS Number: IUPAC Name: 1258-84-0

 $(9\beta,13\alpha,14\beta,20\alpha)-3-Hydroxy-9,13-dimethyl-2-oxo-24,25,26-trinoroleana-1(10),3,5,7-tetraen-29-oic \ acid \ methylester$

Description:

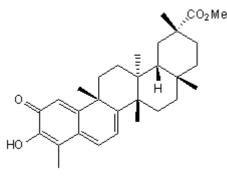
Potent and reversible inhibitor of monoacylglycerol lipase (MGL) (IC₅₀ = 93 nM). Also suppresses NF- κ B activation via inhibition of proteasome chymotrypsin-like activity and IKK $\alpha\beta$. Displays antitumor, anti-inflammatory and antimicrobial activities.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{30}H_{40}O_4$. $\frac{1}{2}H_2O$ Batch Molecular Weight: 473.65 Physical Appearance: orange solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 25 mM ethanol to 10 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:

Byun *et al* (2009) Reactive oxygen species-dependent activation of Bax and Poly(ADP)-ribose) polymerase-1 is required for mitochondrial cell death induced by triterpenoid Pristimerin in human cervical cancer cells. Mol.Pharmacol. **76** 734. PMID: 19574249.

Tiedemann *et al* (2009) Identification of a potent natural triterpenoid inhibitor of proteosome chymotrypsin-like activity and NF-κB with antimyeloma activity in vitro and in vivo. Blood **113** 4027. PMID: 19096011.

King et al (2009) Discovery of potent and reversible monoacylglycerol lipase inhibitors. Chem.Biol. 16 1045. PMID: 19875078.

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