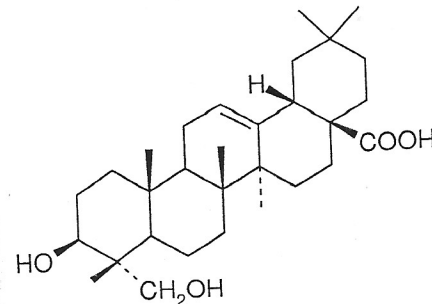


**INDOFINE Chemical Company, Inc.**

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**HPLC****Batch: 05****HEDERAGENIN****020035S****IDENTIFICATION**

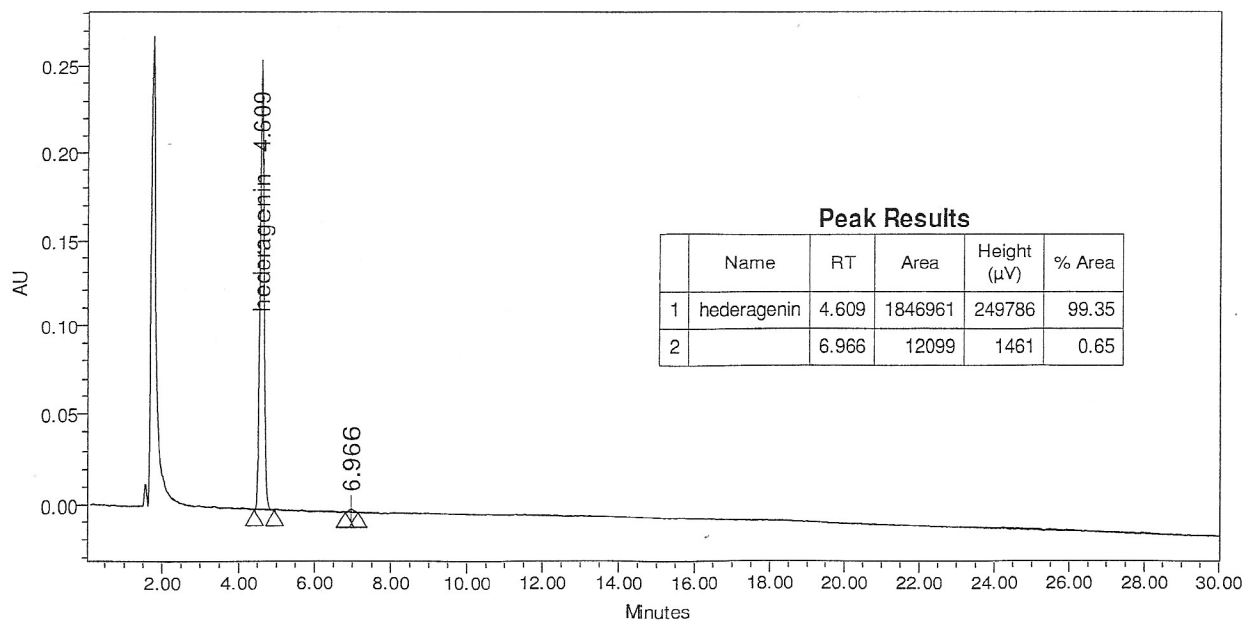
CAS number [465-99-6]
Chemical family Triterpenoids
Chemical names 3,23-Dihydroxyolean-12-en-28 oic acid
Molecular formula $C_{30}H_{48}O_4$
Molecular weight 472.68

CERTIFICATE OF ANALYSIS

Appearance White powder
Melting point 325-326°C
Moisture <0.5%
Residual solvent <0.5%
[α]_D +81° c=0.5 in pyridine
Thin layer chromatography support Silicagel
solvent Methylene chloride/methanol (97/3:V/V)
detection p-anisaldehyde/acetic acid/sulfuric acid (1/40/1:V/V/V) then heating at 110°C 10 mn
Storage Store at room temperature in a dry and dark place. Place in a desiccator under vacuum for 48 hours before use.

HIGH PERFORMANCE LIQUID CHROMATOGRAPHY

Column Symmetry Shield RP18® (4.6 x 150 mm), particle size 3.5 μ m
Solvent Water / Acetonitrile (25/75, V/V)
Flow rate 1 ml/mn
Detector UV visible 200 nm
Sample solvent Methanol



Assay by an HPLC method.

Date of last QC-recheck : June 2009.

Date of retest : June 2013

The values given on the 'Certificate of Analysis' are the results determined at the time of analysis.