Certificate Issued To:
Mountain Rose Herbs
12661 Hoover St
Garden Grove, CA 92841
USA

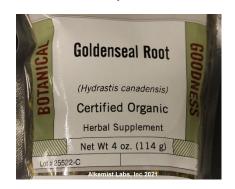


Work performed at: **Alkemist Labs**

12661 Hoover Street Garden Grove, CA 92841 714-754-HERB (4372) sales@alkemist.com

Certificate of Analysis: Goldenseal Root (25522-C)

Microscopy with Digital Photo-Documentation



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Company Name: Mountain Rose Herbs Title: Goldenseal Root

Plant Part: Root Sample Received: 8/3/2021

Sample Description: Clear Reclosable Plastic Bag

Form of Botanical: whole/dry

Appearance: (1) Yellow/Brown Pieces

Lot: 25522-C Sample: 21215UKK_1

Latin Name: Hydrastis canadensis L. [Ranunculaceae]

Reference Sample: M20109CRB Hydrastis canadensis L. [Ranunculaceae] authenticated by macroscopic, microscopic &/or TLC

studies according to the reference sources cited below; held at Alkemist Labs, Garden Grove, CA.

Analyst: E. Sudberg & I. Solorzano

Magnification: (2) 400X

Chemical Reagents: (2) acidified chloral hydrate glycerol solution

Sample Findings: (2) starch granules

Magnification: (3) 400X

Chemical Reagents: (3) acidified chloral hydrate glycerol solution

Sample Findings: (3) cork cell

Reference Source: AHP Monograph: Goldenseal; Homeopathic Pharmacopoeia, 5th Supplement

MIC-SOP-54-04, MIC-SOP-54-05, MIC-SOP-54-06, MIC-SOP-510-07

<u>Comments & Conclusions:</u> This sample has characteristics of Hydrastis canadensis L. [Ranunculaceae] rhizome and root based on comparison with an authenticated reference samples and the characteristics described in the references cited above. The characteristic cellular structures identified in this sample are the starch granules seen in micrograph (2) above. In micrograph (3) we see the cork cells. **This test sample, Goldenseal Root (25522-C), has characteristics of Hydrastis canadensis L. [Ranunculaceae] rhizome and root.**NOTE: The presence of soluble excipients and other plant species material was not detected in this test sample.

Analyzed by: Iris Solorzano Examined, Reviewed & Authorized by: Élan M Sudberg, CEO



Report Date: 8/9/2021