

Immunodermatology Serum Test Report Navigation Guide

The Immunodermatology TESTING REPORT from the University of Utah follows "See Note" and is arranged as outlined below on the following pages:

CLINICAL INFORMATION This content is provided by the ordering clinician and includes the reason for testing. Specimen Details

This includes specimen identification with collected and received dates.

DIAGNOSTIC INTERPRETATION This is a synopsis of key findings from the testing and their diagnostic relevance.

RESULTS

This section reports the discrete finding and value of each test component, along with the reference range.

COMMENTS

Specific

These comments provide an explanation of the test results as they relate to clinical considerations, and include reference to any concurrent and/or previous testing.

General

These comments summarize fundamental information about the test(s) and the component(s) assessed to aid in interpretation of their clinical applicability.

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TESTING METHODS
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The section lists the procedures performed, the test source(s), and the applicable laboratory developed test disclaimer(s).

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TEST RESULTS SUMMARY CHART
A chart tabulating results of tests ordered for the patient by the
same client is included if previous and/or concurrent testing has
been performed.
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ELISA RESULTS GRAPH
A graph of ELISA results also is included if previous and/or
concurrent testing has been performed; the graph may be found on a
subsequent page.
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For testing algorithm and additional information, refer to: arupconsult.com/content/immunobullous-skin-diseases-screening



Patient: ARUP Accession: 22-172-118926

ARUP LABORATORIES | 800-522-2787 | aruplab.com 500 Chipeta Way, Salt Lake City, UT 84108-1221 Jonathan R. Genzen, MD, PhD, Laboratory Director

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IMMUNODERMATOLOGY LABORATORY REPORT

Submitter

ARUP Sendouts

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Desmoglein 1 and Desmoglein 3 (Pemphigus) Antibodies, IgG by ELISA (Final result)
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TESTING REPORT follows "See Note"

See Note

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CLINICAL INFORMATION
Scattered eroded, crusted, and scaling lesions on upper body.
Presumptive diagnosis is pemphigus versus seborrheic dermatitis versus
dermatophytosis.
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Specimen Details
S22-IP0000504 - Serum; Collected: 6/21/2022; Received: 6/22/2022
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DIAGNOSTIC INTERPRETATION

Consistent with pemphigus foliaceus

(See Results and Comments including further testing considerations)

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RESULTS
Enzyme-Linked Immunosorbent Assay (ELISA)
Desmoglein (DSG) 1 and 3 IgG Antibodies
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IgG desmoglein 1 antibody level: 95 U/mL (H)
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Reference Range:
Normal (negative) = Less than 14 U/mL
Borderline/Indeterminate = 14-20 U/mL
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Chart continues on following page(s) ARUP Enhanced Reporting | June 22, 2022 | page 2 of 4 PCP: Unspecified

Increased (H) (positive) = Greater than 20 U/mL

IgG desmoglein 3 antibody level: 3 U/mL

Reference Range: Normal (negative) = Less than 9 U/mL Borderline/Indeterminate = 9-20 U/mL Increased (H) (positive) = Greater than 20 U/mL

COMMENTS

Specific

The ELISA results, demonstrating an increased IgG desmoglein 1 antibody level and a normal IgG desmoglein 3 antibody level, support the diagnosis of pemphigus foliaceus. IgG cell surface antibodies by indirect immunofluorescence and IgG desmoglein antibody levels by ELISA correlate with disease activity in pemphigus. IgA cell surface antibodies, which characteristically are positive by indirect immunofluorescence in IgA pemphigus, may be observed in some pemphigus variants along with positive IgG cell surface antibodies.

If indicated to further evaluate the immunopathological profile, additional testing for serum cell surface antibodies by indirect immunofluorescence may be performed on this specimen by contacting ARUP Client Services, 1-800-242-2787, option 2, with add-on test request(s) for:

- Cell Surface (Epithelial) Antibodies, IgG
- by IIF (ARUP test number 0090266), with or without Pemphigus Antibodies, IgA by IIF (ARUP test number 0092106).

Clinical correlation is needed, including with treatment status, with consideration for monitoring antibody profiles by indirect immunofluorescence as well as antibody levels by ELISAs in assessing disease expression and activity, including response to therapy.

General

Pathogenic antibodies in serum from patients with pemphigus bind to desmogleins, calcium-dependent adhesion molecules in cell surface desmosomes; such antibodies are detected by enzyme-linked immunosorbent assay (ELISA). Specific reactivity to the type of desmoglein may be helpful in determining pemphigus subtypes; the IgG desmoglein 1 antibody level is increased in patients with pemphigus foliaceus, and the IgG desmoglein 3 antibody level, with or without an increased IgG desmoglein 1 antibody level, is predominantly increased in patients with pemphigus vulgaris. Overlapping expression with antibodies to both desmogleins 1 and 3 clinically is associated with both mucosal and skin lesions. ELISA testing for IgG desmoglein 1 and IgG desmoglein 3 antibodies is highly sensitive, with greater than 90 percent of patients with pemphigus showing increased levels of one or both antibodies, and IgG desmoglein

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PCP: Unspecified

antibody levels correlate with disease activity. However, patients with cell surface antibody-positive pemphigus by indirect immunofluorescence can have normal results by ELISA testing because of cell surface antibodies to different desmoglein 1 and/or desmoglein 3 epitopes than displayed in the tested ELISAs or to other adhesion molecules.

TESTING METHODS Enzyme-Linked Immunosorbent Assay (ELISA)

IgG desmoglein 1 and IgG desmoglein 3 serum antibody levels determined by U.S. Food and Drug Administration (FDA)-approved ELISAs (Mesacup, MBL BION). [Two ELISAs]

Electronically signed by , MD, on 06/22/22 at 2:12 PM.

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