

Client: Example Client ABC123
123 Test Drive
Salt Lake City, UT 84108
UNITED STATES

Physician: Doctor, Example

Patient: Patient, Example

DOB: 12/31/1976
Gender: Female
Patient Identifiers: 01234567890ABCD, 012345
Visit Number (FIN): 01234567890ABCD
Collection Date: 00/00/0000 00:00

Collagen Type VII Antibody, IgG by ELISA

ARUP test code 2010905

Collagen Type VII Antibody IgG by ELISA

See Note

CLINICAL INFORMATION

Erythema and milia, few vesicles, progressive over 5 months.

Specimen Details

S22-IP0000530 - Serum; Collected: 6/22/2022; Received: 6/22/2022

DIAGNOSTIC INTERPRETATION

Normal IgG type VII collagen antibody level by ELISA

(See Results and Comments including further testing recommendations)

RESULTS

Enzyme-Linked Immunosorbent Assay (ELISA)

Type VII Collagen IgG Antibodies

IgG type VII collagen antibody level: 2 U/mL

Reference Range:

Normal (negative) = Less than 7 U/mL
Slightly increased (H) (positive) = 7-8 U/mL
Increased (H) (positive) = 9 U/mL and greater

(H) = high/positive

U = antibody level in ELISA units

COMMENTS

Specific

This normal ELISA result for IgG type VII collagen antibodies does not provide support for, but does not rule out, a diagnosis of epidermolysis bullosa acquisita or bullous lupus erythematosus. Patients with these disorders may demonstrate antibodies to basement membrane zone antigens in addition to or other than the type VII collagen epitopes expressed in this ELISA, and patients with other immunobullous diseases likely would show normal findings in this testing.

To further evaluate the immunopathological profile, correlation with serum IgG and IgA basement membrane zone antibodies by indirect immunofluorescence and ELISAs or, more broadly, for IgG and IgA basement membrane zone and cell surface antibodies by indirect immunofluorescence and additional ELISAs is recommended. Additional testing may be performed on this

H=High, L=Low, *=Abnormal, C=Critical

specimen, as clinically indicated, by contacting ARUP Client Services at 1-800-242-2787, option 2, with add-on test request(s) for:

- Pemphigoid Antibody Panel (ARUP test number 0092001) or any of the Pemphigoid Antibody Panel components:
- Basement Membrane Zone (Epithelial) Antibodies, IgG by IIF (ARUP test number 0092056), and/or
- Basement Membrane Zone (Epithelial) Antibodies, IgA by IIF (ARUP test number 0092057), and/or
- Bullous Pemphigoid (BP180 and BP230) Antibodies, IgG by ELISA (ARUP test number 0092566); or, for basement membrane zone and cell surface antibodies:
- Basement Membrane Zone and Cell Surface (Epithelial) Antibodies, IgG and IgA by IIF (ARUP test number 0090299), and
- Desmoglein 1 and Desmoglein 3 (Pemphigus) Antibodies, IgG by ELISA (ARUP test number 0090649), and
- Bullous Pemphigoid (BP180 and BP230) Antibodies, IgG by ELISA (ARUP test number 0092566).

Detection, levels, and patterns of diagnostic antibodies may fluctuate with disease manifestations. Clinical correlation is needed, including direct immunofluorescence findings on a biopsy specimen and treatment status. Monitoring serum antibody profiles by indirect immunofluorescence and antibody levels by ELISAs may aid in assessing disease expression and activity, particularly with persistent, progressive, or changing disease.

General

Type VII collagen is a component of anchoring fibrils within epithelial basement membrane zone (skin and mucous membranes), and patients with epidermolysis bullosa acquisita characteristically develop IgG antibodies to type VII collagen. An increased serum IgG type VII collagen antibody level by ELISA provides support for the diagnosis of epidermolysis bullosa acquisita and also a subset of bullous lupus erythematosus together with dermal localization (floor) of IgG basement membrane zone antibodies on split skin substrate by indirect immunofluorescence. Patients with inflammatory bowel disease, including Crohn disease and ulcerative colitis, with and without mucocutaneous manifestations of epidermolysis bullosa acquisita, may demonstrate increased levels of antibodies to type VII collagen. The major epitopes for antibody reactivity reside in the non-collagenous amino-terminal domain, NC1, with minor epitopes in the non-collagenous carboxy-terminal domain, NC2, of the three identical alpha chains that comprise type VII collagen. The tested ELISA contains combined purified recombinant antigens from both NC1 and NC2 for detection of IgG antibodies. Serum antibody levels above the reference range threshold of 6 U/mL may correlate with disease activity. Patients with epidermolysis bullosa acquisita or bullous lupus erythematosus may develop antibodies to basement membrane zone antigens in addition to or other than the type VII collagen epitopes displayed in this ELISA.

TESTING METHODS
Enzyme-Linked Immunosorbent Assay (ELISA)

IgG type VII collagen serum antibody level determined by ELISA (Mesacup, MBL International). The performance characteristics of this ELISA testing were determined by the Immunodermatology Laboratory at the University of Utah. The testing has not been cleared or approved by the FDA (US Food and Drug Administration). FDA clearance or approval currently is not required for this testing performed in a CLIA-certified laboratory (Clinical Laboratory Improvement Amendments) and intended for clinical use. The results are not intended to be used as the sole means for clinical diagnosis or patient

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management decisions. [One ELISA]

Electronically signed by [REDACTED]

Performed At: IMMUNODERMATOLOGY LABORATORY
417 S. WAKARA WAY, SUITE 2151
SALT LAKE CITY, UT 84108
Medical Director: JOHN JOSEPH ZONE, MD
CLIA Number: 46D0681916

EER Collagen Type VII Ab IgG, by ELISA

See Note

Authorized individuals can access the ARUP
Enhanced Report using the following link:

[REDACTED]

VERIFIED/REPORTED DATES

Procedure	Accession	Collected	Received	Verified/Reported
Collagen Type VII Antibody IgG by ELISA	22-173-114052	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
EER Collagen Type VII Ab IgG, by ELISA	22-173-114052	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00

END OF CHART

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