

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

Physician: Doctor, Example

## **Patient: Patient, Example**

**DOB** 12/31/1986 Gender: Female

**Patient Identifiers:** 01234567890ABCD, 012345

**Visit Number (FIN):** 01234567890ABCD **Collection Date:** 00/00/0000 00:00

## Epidermal Transglutaminase (eTG/TG3) Antibody, IgA by ELISA

ARUP test code 2010902

EER Epidermal Transglutaminase Ab, IgA

See Note

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

Epidermal Transglutaminase Ab IgA, ELISA

See Note

CLINICAL INFORMATION Sporadic elbow lesions with itching.

Specimen Details

- ; Collected: 1/22/2024; Received: 1/22/2024

## DIAGNOSTIC INTERPRETATION

Normal IgA epidermal transglutaminase (eTG), also known as transglutaminase 3 (TG3), antibody level by ELISA

(See Results and Comments including recommendations for correlating with other testing)

Enzyme-Linked Immunosorbent Assay (ELISA)

Epidermal Transglutaminase (eTG/TG3) IgA Antibodies

IgA epidermal transglutaminase antibody level: 5 U/mL

Reference Range:

Normal (negative) = Less than 16 U/mL Borderline/Indeterminate = 16-22 U/mL

Increased (H) (positive) = Greater than 22 U/mL

(H) = high/positive

U = antibody level in ELISA units

COMMENTS

Specific

This normal IgA epidermal transglutaminase (eTG), also known as transglutaminase 3 (TG3), antibody level by ELISA does not provide support for the diagnosis of dermatitis herpetiformis but does not rule it out. Most patients with dermatitis

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

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herpetiformis have associated celiac disease, and celiac disease serologic testing, including IgA tissue transglutaminase (tTG), also known as transglutaminase 2 (TG2), antibodies by ELISA and IgA endomysial antibodies by indirect immunofluorescence, can provide diagnostically helpful information.

Patients on a gluten-restricted diet may have normal levels of IgA dermatitis herpetiformis and celiac disease antibodies. Patients who are IgA deficient may not have IgA antibodies detectable in their sera. Correlation of these results with respect to patient treatment status and total serum IgA level is needed. Rare patients, both who are and who are not IgA deficient, have positive IgG endomysial antibodies and/or increased IgG tTG/TG2 antibodies and not IgA. Correlation with IgG dermatitis herpetiformis/celiac disease antibody testing in addition to IgA may be helpful. Testing for celiac disease antibodies may be accomplished by request for the Celiac Disease antibodies may be accomplished by request for the Celiac Disease Reflexive Cascade (ARUP test number 2008114), contact ARUP Client Services, 1-800-242-2787, option 2, for assistance.

Correlation with direct immunofluorescence on a biopsy specimen also can provide diagnostic findings when serum testing does not. If not already performed, direct immunofluorescence testing can be accomplished on a biopsy specimen submitted through ARUP Laboratories (ARUP test number 0092572, CUTDIF); contact ARUP Client Services at 1-800-242-2787, option 2, for assistance.

Detection, levels, and patterns of diagnostic serum antibodies may fluctuate with disease manifestations, and immunobullous diseases have overlapping clinical features. If indicated to evaluate the immunopathological profile in the patient serum with respect to other immunoballous diseases, additional testing may be performed on this specimen by contacting ARUP Client Services at 1-800-242-2787, option 2, with add-on test request(s) for:

- uest(s) for:
  Basement Membrane Zone Antibody Panel (ARUP test number 3001410), for pemphigoid, epidermolysis bullosa acquisita, linear IgA disease; and/or
  Pemphigus Antibody Panel, IgG (ARUP test number 0090650), for IgG variant pemphigus including pemphigus foliaceus and pemphigus vulgaris; and/or
  Pemphigus Antibodies, IgA by IIF for IgA pemphigus (ARUP Test number 0092106)
- Test number 0092106)
- Or the serum test panel that includes all the above:
   Immunobullous Disease Antibody Panel (ARUP test number
- 3001409).

Monitoring serum antibody profiles and levels may aid in assessing disease expression and activity, particularly with persistent, progressive, or changing disease.

General

Epidermal transglutaminase (eTG), also known as transglutaminase 3 (TG3), is the dominant antigen to which IgA antibodies develop in dermatitis herpetiformis. IgA eTG/TG3 antibodies account for the characteristic dermal IgA reactivity (subepithelial granules and/or fibrils discontinuously beneath the basement membrane zone with stippling in dermal papillae) observed by direct immunofluorescence in skin biopsy specimens. An increased IgA eTG/TG3 antibody level in serum determined by ELISA, when present is distinctly characteristic of dermatitis present, is distinctly characteristic of dermatitis herpetiformis and provides support for the diagnosis.

Levels of IgA eTG/TG3 antibodies may correlate with disease activity in individual patients with dermatitis herpetiformis. Most patients with dermatitis herpetiformis have gluten sensitivity with celiac disease and characteristic IgA antibodies to tissue transglutaminase (tTG), also known as transglutaminase 2 (TG2), by ELISA, along with positive IgA endomysial antibodies by indirect immunofluorescence which correlate with disease activity. Patients with dermatitis

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herpetiformis can have an antibody profile specific for eTG/TG3 with higher avidity than to tTG/TG2; however, a normal IgA eTG/TG3 antibody level does not rule out the diagnosis of dermatitis herpetiformis.

TESTING METHODS Enzyme-Linked Immunosorbent Assay (ELISA)

IgA epidermal transglutaminase (eTG), also known as transglutaminase 3 (TG3), antibody level in serum determined by ELISA (ALPCO Immunoassays). 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 management decisions. [One ELISA]

Electronically signed by 11:00 PM.

on 01/25/24 at

Performed At: IMMUNODERMATOLOGY LABORATORY 417 S. WAKARA WAY, SUITE 2151 SALT LAKE CITY, UT 84108

Medical Director: KRISTIN M. LEIFERMAN, MD CLIA Number: 46D0681916

VERIFIED/REPORTED DATES				
Procedure	Accession	Collected	Received	Verified/Reported
EER Epidermal Transglutaminase Ab, IgA	24-022-102339	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Epidermal Transglutaminase Ab IgA, ELISA	24-022-102339	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00

**END OF CHART** 

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