MAYO CLINIC LABORATORIES

Test Definition: EMAT

Endomysial Antibodies, IgA, Titer, Serum

Overview

Useful For

Confirmation of a positive IgA-endomysial antibodies result

Method Name

Only orderable as a reflex. For more information see EMA / Endomysial Antibodies, IgA, Serum.

Indirect Immunofluorescence Assay (IFA)

NY State Available

Yes

Specimen

Specimen Type

Serum

Specimen Required

Only orderable as a reflex. For more information see EMA / Endomysial Antibodies, IgA, Serum.

Specimen Minimum Volume

0.5 mL

Reject Due To

Gross hemolysis	Reject
Gross lipemia	Reject
Gross icterus	Reject

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Serum	Refrigerated (preferred)	14 days	
	Frozen	30 days	
	Ambient	14 days	

Clinical & Interpretive

Clinical Information

Circulating IgA endomysial antibodies are present in 70% to 80% of patients with dermatitis herpetiformis or celiac disease, and in nearly all such patients who have high grade gluten-sensitive enteropathy and are not adhering to a gluten-free diet.

Because of the high specificity of endomysial antibodies for celiac disease, the test may obviate the need for multiple small bowel biopsies to verify the diagnosis. This may be particularly advantageous in the pediatric population, including the evaluation of children with failure to thrive.

Reference Values

Only orderable as a reflex. For more information see EMA / Endomysial Antibodies, IgA, Serum.

Negative

Interpretation

The finding of IgA-endomysial antibodies (EMA) is highly specific for dermatitis herpetiformis or celiac disease.

The titer of IgA-EMA generally correlates with the severity of gluten-sensitive enteropathy.

If patients strictly adhere to a gluten-free diet, the titer of IgA-EMA should begin to decrease within 6 to 12 months of onset of dietary therapy.

Occasionally, the staining results cannot be reliably interpreted as positive or negative because of strong smooth muscle staining, weak EMA staining, or other factors. In these cases, the results will be reported as "indeterminate," and additional testing is recommended; see TTGA / Tissue Transglutaminase Antibody, IgA, Serum and IGA / Immunoglobulin A (IgA), Serum.

Cautions

A negative result (absence of circulating IgA-endomysial antibodies) does not exclude the diagnosis of dermatitis herpetiformis or celiac disease.

Patients with mild gluten-sensitive enteropathy may have a negative result.

Clinical Reference

1. Peters MS, McEvoy MT: IgA antiendomysial antibodies in dermatitis herpetiformis. J Am Acad Dermatol. 1989 Dec;21(6):1225-1231. doi: 10.1016/s0190-9622(89)70335-2
2. Chorzelski TP, Buetner EH, Sulej J, et al: IgA anti-endomysium antibody: a new immunological marker of dermatitis herpetiformis and coeliac disease. Br J Dermatol. 1984 Oct;111(4):395-402. doi: 10.1111/j.1365-2133.1984.tb06601.x
3. Kapuscinska A, Zalewski T, Chorzelski TP, et al: Disease specificity and dynamics of changes in IgA class anti-endomysial antibodies in celiac disease. J Pediatr Gastroenterol Nutr. 1987;6(4):529-534. doi: 10.1097/00005176-198707000-00006
4. Elwenspoek MMC, Jackson J, Dawson S, et al: Accuracy of potential diagnostic indicators for coeliac disease: a systematic review protocol. BMJ Open. 2020 Oct 5;10(10):e038994. doi: 10.1136/bmjopen-2020-038994

Performance

Method Description

Frozen sections of primate esophagus substrate are overlaid with dilutions of patient's serum, incubated, covered with fluorescein-conjugated IgA antiserum, and interpreted with a fluorescence microscope.(Package insert: NOVA Lite Monkey Oesophagus IFA Kit/Slides. Inova Diagnostics; 05/2018; Chorzelski TP, Beutner EH, Sulej J, et al: IgA anti-endomysium antibody: a new immunological marker of dermatitis herpetiformis and coeliac disease. Br J Dermatol. 1984 Oct;111(4):395-402. doi: 10.1111/j.1365-2133.1984.tb06601.x; Kupascinska A, Zalewski T, Chorzelski TP, et al: Disease specificity and dynamics of changes in IgA class anti-endomysial antibodies in celiac disease. J Pediatr Gastroenterol Nutr. 1987;6(4):529-534. doi: 10.1097/00005176-198707000-00006)

PDF Report

No

Day(s) Performed

Monday through Friday

Report Available

2 days

Specimen Retention Time

14 days

Performing Laboratory Location

Rochester

Fees & Codes

Fees

- Authorized users can sign in to Test Prices for detailed fee information.
- Clients without access to Test Prices can contact Customer Service 24 hours a day, seven days a week.
- Prospective clients should contact their account representative. For assistance, contact Customer Service.

Test Classification

This test has been modified from the manufacturer's instructions. Its performance characteristics were determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the US Food and Drug Administration.

CPT Code Information

86231

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
EMAT	EMA Titer, S (IgA)	27038-9

Test Definition: EMAT

Endomysial Antibodies, IgA, Titer, Serum

Result ID	Test Result Name	Result LOINC® Value
65091	EMA Titer, S (IgA)	27038-9