
Lab Dept: Chemistry

Test Name: ANTI-MULLERIAN HORMONE, SERUM

General Information

Lab Order Codes: AMH1

Synonyms: AMH

CPT Codes: 82397 – Chemiluminescent assay

Test Includes: Anti-Mullerian Hormone level reported in ng/mL.

Logistics

Test Indications: Assessing ovarian status, including ovarian reserve and ovarian responsiveness, as part of an evaluation for fertility and assisted reproduction protocols. Assessment of menopausal status, including premature ovarian failure. Evaluation of infants with ambiguous genitalia and other intersex conditions. Evaluating testicular function in infants and children. Monitoring patients with antimullerian hormone-secreting granulosa cell tumors.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Clinic Laboratories (MML Test: AMH1)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 612-813-6280

Test Availability: Daily, 24 hours

Turnaround Time: 1 - 3 days, performed Monday - Saturday

Special Instructions: See [Patient Preparation](#)

Specimen

Specimen Type: Blood

Container: SST (Gold, marble or red) tube

Draw Volume: 3 mL (Minimum: 2.25 mL) blood

Processed Volume: 1 mL (Minimum: 0.75 mL) serum

Collection: Routine venipuncture

Special Processing: Lab Staff: Centrifuge specimen. Separate serum aliquot into a screw capped plastic vial. Store and ship at refrigerated temperatures.

Patient Preparation: For 12 hours before specimen collection do not take multivitamins or dietary supplements containing biotin (vitamin B7), which is commonly found in hair, skin, and nail supplements and multivitamins.

Sample Rejection: Mislabeled or unlabeled specimen; gross hemolysis; gross icterus

Interpretive

Reference Range:

Age	Range (ng/mL)
Males	
<2 years:	18 - 283 ng/mL
2 – 12 years:	8.9 - 109 ng/mL
>12 years:	<13 ng/mL
Females	
<3 years:	0.11 – 4.2 ng/mL
3 - 6 years:	0.21 – 4.9 ng/mL
7 - 11 years:	0.36 – 5.9 ng/mL
12 – 14 years:	0.49 – 6.9 ng/mL
15 – 19 years:	0.62 – 7.8 ng/mL
20 – 24 years:	1.2 – 12 ng/mL
25 – 29 years:	0.89 – 9.9 ng/mL
30 – 34 years:	0.58 – 8.1 ng/mL
40 – 44 years:	0.03 – 5.5 ng/mL
45- 50 years:	<.026 ng/mL
51 – 55 years:	< 0.88 ng/mL

>55 years:	<0.03 ng/mL
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Critical Values:

N/A

Limitations:

Interference was observed at biotin concentrations above 30 ng/mL. Samples should not be taken from patients receiving therapy with high biotin doses until at least 12 hours following the last biotin dose.

The following drugs may interfere with this test: Cetrotide, Ovitrelle, Endometin and Follistatin: do not use this test to analyze samples from patients who have received 1 or more of these products within 1 to 2 weeks of testing.

This is no high-dose hook effect at AMH concentrations up to 1400 ng/mL.

In rare cases, interference due to extremely high titers of antibodies to analyte-specific antibodies, streptavidin or ruthenium can occur. The laboratory should be alerted if the result does not correlate with the clinical presentation.

For diagnostic purposes, the results should always be assessed in conjunction with the patient's medical history, clinical examination and other findings.

AMH immunoassays are not standardized and values obtained with different assay methods or kits may be different and cannot be used interchangeably.

If using as a tumor marker, test results cannot be interpreted as absolute evidence for the presence or absence of malignant disease.

Methodology:

Electrochemiluminescent Assay (ELCIA)

References:

[Mayo Clinic Laboratories](#) (August 2021)

Updates:

3/10/14: CPT update, previously listed as 83519.
12/19/2017: Updated method and reference ranges
8/23/2021: Moved from ESL to Mayo.