
Lab Dept: Serology

Test Name: HIV-1,2 ANTIGEN/ANTIBODY EVALUATION (<2 YEARS) REFLEX (ANTI-HIV-1,2)

General Information

Lab Order Codes: HIV12

Synonyms: Human Immunodeficiency Virus Types 1 and 2 (combined) Antibodies; Anti-HIV-1,2; Anti-HIV

CPT Codes: 87389 – HIV-1 antigen, with HIV1/2 antibodies, single result
86701 – HIV-1 antibody (if appropriate)
86702 – HIV antibody-type 2 (if appropriate)
87356 – HIV-1 RNA Detection (if appropriate)

Test Includes: HIV-1,2 Ag/Antibody reported as negative or reactive. If HIV-1,2 ag/antibody is reactive, then HIV-1,2 antibody differentiation is performed (by rapid immunographic method) at an additional charge.

Logistics

Test Indications: Screening and confirmation of HIV-1 and HIV-2 infection.

Lab Testing Sections: Serology - Sendouts

Referred to: Mayo Medical Laboratories (Test: HVCOP)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 – 2 days, tests performed Monday - Saturday. Confirmatory testing may increase turnaround times.

Special Instructions: This test is not offered as a screening or confirmatory test for blood donor specimens. See Patient HIV Testing Algorithm (http://www.mayoreferenceservices.org/mrs/media/test-algorithms/hiv_serologic_screening.pdf) for more information.

Specimen

Specimen Type: Blood

Container:	Lavender (EDTA) top tube
Draw Volume:	6 mL (Minimum: 3.6 mL) blood
Processed Volume:	2 mL (Minimum 1.2 mL) plasma
Collection:	Routine venipuncture
Special Processing:	Lab Staff: Centrifuge specimen within 24 hours, remove plasma aliquot into screw-capped round bottom plastic vial. Store and ship at frozen temperatures. Forward promptly.
Patient Preparation:	None
Sample Rejection:	Specimens other than EDTA plasma as indicated; lithium heparin samples are unacceptable; mislabeled or unlabeled specimens; gross hemolysis; gross lipemia; grossly icteric

Interpretive

Reference Range:	Negative (reported as negative or reactive) Additional testing at an additional charge will be performed if the specimen is reactive. Refer to Test Includes:
Critical Values:	N/A
Limitations:	<p>Reactive result of this assay does not differentiate among reactivity with HIV-1 p24 antigen, HIV-1 antibody, and HIV-2 antibody.</p> <p>A reactive screening test result is not diagnostic for HIV infection and should be considered preliminary.</p> <p>The positive predictive value of a reactive screening test result is highly dependent on the prevalence of HIV infection in the population tested. The lower the prevalence of HIV infection, the lower the positive predictive value and higher the false-positive rate of the test. Diagnosis of HIV infection must be based on positive results of the supplemental or confirmatory serologic or molecular tests.</p> <p>Recipients of experimental HIV-1 vaccines may have false-reactive HIV antibody test results due to the presence of vaccine-induced, HIV-1-specific antibodies without actual HIV infection.</p> <p>Negative serologic or molecular HIV screening test results should be evaluated with caution in patients with clinical symptoms and/or a history of high-risk behavior for HIV infection. Repeat testing in 1 to 2 months is recommended in these at-risk individuals.</p> <p>Assay performance characteristics have not been established for the following specimen characteristics:</p>

- Grossly hemolyzed (hemoglobin level of >500 mg/dL)
- Grossly lipemic (triolein level of >1,250 mg/dL)
- Grossly icteric (total bilirubin level of >20 mg/dL)
- Heat-inactivated specimens
- Cadaveric specimens
- Presence of particulate matter

Methodology:

HIV-1, Ag/Ab Screen and HIV-2 Aby: Chemoluminescent particle assay
HIV-1 Differentiation: Rapid Immunographic method
HIV-2 Differentiation: Rapid Immunographic method
HIV-1 RNA Detection: Real-Time Reverse Transcription-Polymerase Chain Reaction (RT-PCR)

References:

[Mayo Medical Laboratories Web Page](#) May 2019