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**Lab Dept:** Serology

**Test Name:** BRUCELLA ANTIBODY SCREEN, IGG/IGM

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***General Information***

**Lab Order Codes:** BRUA

**Synonyms:** Brucella Serology; Brucella melitensis; Brucella suis

**CPT Codes:** 86622 X2 – Antibody; Brucella

86622 – Antibody, Brucella (additionally, confirmatory testing by bacterial agglutination, if appropriate)

**Test Includes:** Brucella IgG antibody, IgM antibody and Interpretation. Reported as positive, negative or equivocal. If Brucella antibody screen is positive or equivocal, Brucella Antibody by bacterial agglutination will be sent out for confirmatory testing at an additional charge.

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***Logistics***

**Test Indications:** Useful for detection of antibodies in patients having brucellosis.

**Lab Testing Sections:** Serology - Sendouts

**Referred to:** Mayo Medical Laboratories (Test: 89476/BRUGM) and possible reflex (Test:8112/BRUTA) for confirmatory testing.

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 1 – 3 days, test set up is Monday, Wednesday, Friday

**Special Instructions:** N/A

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***Specimen***

**Specimen Type:** Blood

**Container:** Red top tube

**Draw Volume:** 6 mL (Minimum: 3.3) blood

<b>Processed Volume:</b>	2 mL (Minimum: 1.1 mL) serum
<b>Collection:</b>	Routine venipuncture
<b>Special Processing:</b>	Lab Staff: Centrifuge specimen, remove serum aliquot into a screw-capped round bottom vial. Store refrigerated. Ship refrigerated. Forward promptly.
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Specimens other than serum; gross hemolysis; gross lipemia; mislabeled or unlabeled specimens

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### ***Interpretive***

**Reference Range:** IgG: Negative  
IgM: Negative

Note: Results will be reported as Positive, Negative or Equivocal. If results are reported as positive or equivocal, reflex confirmatory testing will be performed by agglutination.

Reflex confirmatory titer: <1:80

**Critical Values:** N/A

**Limitations:** This test utilizes antigen derived from *Brucella abortus* strain W99. However, significant cross-reactivity exists with other *Brucella* species and, therefore, the assays should not be used to differentiate infection at the species level.

*Brucella canis*, a rare cause of brucellosis, may not be detected by this method.

Detection of specific IgM or IgG-class antibody to *Brucella melitensis* and *Brucella suis* by this method has not been determined.

ELISA tests are intended to be used as a screen only. Positive results should be followed up using an agglutination assay for confirmation. Results must be used in conjunction with symptoms, patient history, and other clinical findings.

**Methodology:** Enzyme-Linked Immunosorbent (ELISA)  
Confirmatory test: Direct Agglutination

**References:** [Mayo Medical Laboratory](#) June 2013

**Updates:**

12/16/03: New method implemented at Mayo. Previously Agglutination. New test separates out IgG and IgM determinations. Draw volume previously 1.5 mL.

5/11/2009: MML change in test # (previously 84327), and addition of reflex test to bacterial agglutination for positive/equivocal results.

11/16/2010: MML change to internal reflex testing, previously sent to ARUP.