
Lab Dept: Serology

Test Name: ARBOVIRUS ANTIBODY PANEL, IGG/IGM, CSF

General Information

Lab Order Codes: ARBSF

Synonyms: Arbovirus Ab, CSF

CPT Codes: 86651 x2 – Antibody; encephalitis, California
86652 x2 – Antibody; encephalitis, Eastern equine
86653 x2 – Antibody; encephalitis, St. Louis equine
86654 x2 – Antibody; encephalitis, Western equine

Test Includes: IgM and IgG antibody determinations for 4 different encephalitis strains in spinal fluid.

Logistics

Test Indications: Useful for detecting antibodies to Eastern equine encephalitis virus, LaCrosse/California encephalitis virus, St. Louis equine encephalitis virus, and Western equine encephalitis, aiding a diagnosis arboviral encephalitis.

Lab Testing Sections: Serology - Sendouts

Referred to: Mayo Medical Laboratories (MML Test: 83897/ABOPC)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 - 4 days, performed Monday - Friday

Special Instructions: When this test is ordered, serum and spinal fluid are recommended. See [Arbovirus Antibody](#) for blood collection and other test information.

Specimen

Specimen Type: CSF

Container: CSF conical tube

Draw Volume: 0.5 mL (Minimum: 0.2 mL) spinal fluid

Collection: Routine CSF collection

Special Processing: Lab Staff: Aliquot 0.5 mL (Minimum: 0.2 mL) spinal fluid into a sterile screw-capped, round bottom, plastic vial. Store and ship at refrigerated temperatures.

Patient Preparation: None

Sample Rejection: Room temperature specimens; mislabeled or unlabeled specimens

Interpretive

Reference Range:

Reference ranges apply to all ages.	
California (LaCrosse) Encephalitis Antibody	
IgG:	<1:10
IgM:	<1:10
Eastern Equine Encephalitis Antibody	
IgG:	<1:10
IgM:	<1:10
St. Louis Encephalitis Antibody	
IgG:	<1:10
IgM:	<1:10
Western Equine Encephalitis	
IgG:	<1:10
IgM:	<1:10

Critical Values: N/A

Limitations:

All results must be correlated with clinical history and other data available to the attending physician. False-positive results may be caused by breakdown of blood-brain barrier, or by the introduction of blood into the CSF collection. Since cross-reactivity with dengue fever virus does occur with St. Louis encephalitis antigens, and, therefore, cannot be differentiated further, the specific virus responsible for positive results may be deduced by the travel history of the patient, along with available medical and epidemiological data, unless the virus can be isolated.

Eastern Equine Encephalitis and Western Equine Encephalitis viruses show some cross-reactivity; however, antibody responses to the infecting virus is typically at least 8-fold higher.

Methodology:

Immunofluorescence Assay (IFA)

References:

[Mayo Medical Laboratories](#) July 2013