

Reporting Title: Meningoencephalitis Panel CSF

Performing Location: Focus Diagnostics,

Specimen Requirements:

Submit 5 mL spinal fluid (CSF). Refrigerate specimen after collection, and ship at refrigerate temperature.

Specimen Type	Temperature	Time
CSF	Refrigerated (preferred)	7 days
	Frozen	30 days

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
Z2891	Mumps Ab IgG, IFA	Alphanumeric		In Process
Z2892	Mumps Ab IgM, IFA	Alphanumeric		In Process
Z2893	Interpretation	Alphanumeric		In Process
Z2888	LCM IgG	Alphanumeric		In Process
Z2889	LCM IgM	Alphanumeric		In Process
Z2890	Interpretation	Alphanumeric		In Process
Z2880	Eastern Equine IgG	Alphanumeric		In Process
Z2881	Eastern Equine IgM	Alphanumeric		In Process
Z2882	Interpretation	Alphanumeric		In Process
Z2877	California IgG	Alphanumeric		In Process
Z2878	California IgM	Alphanumeric		In Process
Z2879	Interpretation	Alphanumeric		In Process
Z2894	St Louis IgG	Alphanumeric		In Process
Z2895	St Louis IgM	Alphanumeric		In Process
Z2896	Interpretation	Alphanumeric		In Process
Z2897	Western Equine IgG	Alphanumeric		In Process
Z2898	Western Equine IgM	Alphanumeric		In Process
Z2899	Interpretation	Alphanumeric		In Process
Z3241	West Nile Ab IgG, CSF	Alphanumeric		In Process

Result ID	Reporting Name	Type	Unit	LOINC®
Z3242	West Nile Ab IgM, CSF	Alphanumeric		In Process
Z2886	HSV 1 IgG Index	Alphanumeric		In Process
Z2887	HSV 2 IgG Index	Alphanumeric		In Process
Z2900	HSV 1 IgM Screen	Alphanumeric		In Process
Z2901	HSV 2 IgM Screen	Alphanumeric		In Process

Components:

Test ID	Reporting Name	CPT Units	CPT Code	Always Performed	Orderable Separately
Billing only	MUMPS ANTIBODY	2	86735		
Billing only	LYMPH CHORIOMENINGITIS AB	2	86727		
Billing only	ENCEPHALITIS ANTIBODY	2	86652		
Billing only	ENCEPHALITIS ANTIBODY	2	86651		
Billing only	ENCEPHALITIS ANTIBODY	2	86653		
Billing only	ENCEPHALITIS ANTIBODY	2	86654		
Billing only	HERPES SIMPLEX TEST	1	86695		
Billing only	HERPES SIMPLEX TYPE 2	1	86696		
Billing only	HERPES SIMPLEX TEST	1	86695		
Billing only	HERPES SIMPLEX TYPE 2	1	86696		
Billing only	WEST NILE VIRUS AB IGM	1	86788		
Billing only	WEST NILE VIRUS ANTIBODY	1	86789		
FMAPC	Mumps Antibody Panel, IFA CSF			Yes	No
FLCVC	LCM Virus Ab, IFA CSF			Yes	No
FEEEEV	E. Equine Enceph Virus Ab, IFA CSF			Yes	No
FCEVP	California Encephalitis Ab Panel, CSF			Yes	No
FSLEV	St Louis Encephalitis Ab, IFA (CSF)			Yes	No
FWEQE	W. Equine Enceph IgG/IgM, IFA CSF			Yes	No
FWVGM	West Nile Virus Ab (IgG, IgM), CSF			Yes	No
FHSV	HSV 1/2 IgG Type-Specific Ab, CSF			Yes	No
FHSV A	HSV 1/2 IgM Ab IFA Reflex to Titer			Yes	No

Reflex Tests:

Test ID	Reporting Name	CPT Units	CPT Code	Always Performed	Orderable Separately
FMTR1	HSV 1 IgM Titer		Profile	No	No
FMTR2	HSV 2 IgM Titer	1	86696	No	No

Result Codes for Reflex Tests:

Test ID	Result ID	Reporting Name	Type	Unit	LOINC®
FMTR1	Z2957	HSV 1 IgM Titer	Alphanumeric		In Process
FMTR2	Z2958	HSV 2 IgM Titer	Alphanumeric		In Process

Reference Values:

Meningoencephalitis (Encephalitis) Panel (CSF)

Mumps Antibody Panel, IFA (CSF)

Reference Range: IgG <1:8
IgM <1:1

Diagnosis of infections of the central nervous system can be accomplished by demonstrating the presence of intrathecally-produced specific antibody. Interpretation of results may be complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps. The interpretation of CSF results must consider CSF-serum antibody ratios to the infectious agent.

This assay was developed and its performance characteristics have been determined by Focus Diagnostics. It has not been cleared or approved by the U.S. Food and Drug Administration. The FDA has determined that such clearance or approval is not necessary. Performance characteristics refer to the analytical performance of the test.

Lymphocytic Choriomeningitis (LCM) Virus Ab, IFA (CSF)

Reference Range: IgG <1:1
IgM <1:1

Interpretive Criteria: <1:1 Antibody Not Detected
> or = 1:1 Antibody Detected

Diagnosis of infections of the central nervous system can be accomplished by demonstrating the presence of intrathecally-produced specific antibody. However, interpreting results is complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps.

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Eastern Equine Encephalitis Virus Antibody, IFA (CSF)

Reference Range: IgG <1:4
IgM <1:4

NOTE: Specimens positive for arbovirus antibody are CDC reportable. Please contact your local public health agency.

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California Encephalitis Virus Antibody Panel, IFA (CSF)

Reference Range: IgG <1:4
IgM <1:4

NOTE: Specimens positive for arbovirus antibody are CDC reportable. Please contact your local public health agency.

Diagnosis of infections of the central nervous system can be accomplished by demonstrating the presence of intrathecally-produced specific antibody. However, interpreting results is complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps. The interpretation of CSF results must consider CSF-serum antibody ratios to the infectious agent.

St. Louis Encephalitis Virus Antibody, IFA (CSF)

Reference Range: IgG <1:4
IgM <1:4

NOTE: Specimens positive for arbovirus antibody are CDC reportable. Please contact your local public health agency.

Diagnosis of infections of the central nervous system can be accomplished by demonstrating the presence of intrathecally-produced specific antibody. However, interpreting results is complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps. The interpretation of CSF results must consider CSF-serum antibody ratios to the infectious agent.

Western Equine Encephalitis IgG & IgM Ab Pnl, IFA (CSF)

Reference Range: IgG <1:4
IgM <1:4

NOTE: Specimens positive for arbovirus antibody are CDC reportable. Please contact your local public health agency.

Diagnosis of infections of the central nervous system can be accomplished by demonstrating the presence of intrathecally-produced specific antibody. However, interpreting results is complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps. The interpretation of CSF results must consider CSF-serum antibody ratios to the infectious agent.

West Nile Virus Antibodies (IgG, IgM), CSF

Reference Range: IgG <1.30
IgM <0.90

Interpretive Criteria: IgG: <1.30 Antibody not detected
1.30 - 1.49 Equivocal
>=1.50 Antibody detected

IgM: <0.90 Antibody not detected
0.90 - 1.10 Equivocal
>1.10 Antibody detected

West Nile Virus (WNV) IgM is usually detectable in CSF from WNV-infected patients with encephalitis or meningitis at the time of clinical presentation. Because IgM antibody does not readily cross the blood-brain barrier, IgM antibody in CSF strongly suggests acute central nervous system infection. WNV antibody results from CSF should be interpreted with caution. Possible complicating factors include low levels of antibody found in CSF, passive transfer of antibodies from blood, and contamination via bloody spinal taps. Antibodies induced by other Flavivirus infections (e.g. Dengue virus, St. Louis encephalitis virus) may show cross-reactivity with WNV.

WNV antibody results for CSF should be interpreted with caution. Complicating factors include low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps.

Herpes Simplex Virus 1/2 (IgG) Type Specific Antibodies, CSF

Reference Range: < or = 1.00

Interpretive Criteria: < or = 1.00 Antibody not detected
> 1.00 Antibody detected

Detection of HSV type-specific IgG in CSF may indicate central nervous system (CNS) infection by that HSV type. However, interpretation of results may be complicated by a number of factors, including low antibody levels found in CSF, passive transfer of antibody across the blood-brain barrier, and serum contamination of CSF during CSF collection. PCR detection of type-specific HSV DNA in CSF is the preferred method for identifying HSV CNS infections.

Herpes Simplex Virus 1/2 Antibody (IgM), IFA with Reflex to Titer, CSF

Reference Range: Negative

The IFA procedure for measuring IgM antibodies to HSV 1 and HSV 2 detects both type-common and type-specific HSV antibodies. Thus, IgM reactivity to both HSV 1 and HSV 2 may represent crossreactive HSV antibodies rather than exposure to both HSV 1 and HSV 2.

Diagnosis of central nervous system infections can be accomplished by demonstrating the presence of intrathecally-produced specific antibody. Interpreting results may be complicated by low antibody levels found in CSF, passive transfer of antibody from blood, and contamination via bloody taps. The interpretation of CSF results must consider CSF-serum antibody ratios to the infectious agent.

This test was developed and its performance characteristics have been determined by Focus Diagnostics. Performance characteristics refer to the analytical performance of the test.

Test Performed by: Focus Diagnostics, Inc.
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