Test Definition: OLIGS

Oligoclonal Banding, Serum (Non-Orderable)

Overview

Useful For

Only orderable as part of a profile. For more information see:
OLIG / Oligoclonal Banding, Serum and Spinal Fluid
MSP3 / Multiple Sclerosis (MS) Cascade, Serum and Spinal Fluid

Diagnosis of multiple sclerosis; especially useful in patients with equivocal clinical presentation and radiological findings

Determining number of serum oligoclonal bands in order to calculate the number of cerebrospinal fluid-specific bands present

Method Name

Only orderable as part of a profile. For more information see:
OLIG / Oligoclonal Banding, Serum and Spinal Fluid
MSP3 / Multiple Sclerosis (MS) Cascade, Serum and Spinal Fluid

Isoelectric Focusing (IEF) with IgG Immunoblot Detection

NY State Available

Yes

Specimen

Specimen Type

Serum

Specimen Required

Only orderable as part of a profile. For more information see:
OLIG / Oligoclonal Banding, Serum and Spinal Fluid
MSP3 / Multiple Sclerosis (MS) Cascade, Serum and Spinal Fluid

Specimen Minimum Volume

Serum: 0.4 mL

Reject Due To

Gross hemolysis	OK
Gross lipemia	OK
Gross icterus	OK

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Serum	Refrigerated (preferred)	14 days	
	Ambient	14 days	
	Frozen	14 days	

Clinical & Interpretive

Clinical Information

The diagnosis of multiple sclerosis (MS) is dependent on clinical, radiological, and laboratory findings. The detection of increased intrathecal immunoglobulin (Ig) synthesis is the basis for current diagnostic laboratory tests for MS.

These tests include the measurement of kappa free light chains in the cerebrospinal fluid (CSF) and CSF oligoclonal band (OCB) detection. Abnormal CSF OCB patterns have been reported in 70% to 80% of MS patients.

Increased intrathecal Ig synthesis may occur in other inflammatory CSF diseases, and therefore, this assay is not specific for MS.

Reference Values

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CSF Oligoclonal Bands <2 bands

Interpretation

When the oligoclonal band assay detects 2 or more unique IgG bands in the cerebrospinal fluid (CSF), the result is positive.

Cerebrospinal fluid is used in the diagnosis of multiple sclerosis (MS) by identifying increased intrathecal IgG synthesis qualitatively (oligoclonal bands). The presence of 2 or more unique CSF oligoclonal bands was reintroduced as one of the diagnostic criteria for MS in the 2017 revised McDonald criteria. These findings, however, are not specific for MS as CSF-specific IgG synthesis may also be found in patients with other neurologic diseases including infectious, inflammatory, cerebrovascular, and paraneoplastic disorders. Clinical correlation recommended.

Cautions

This test is not specific for multiple sclerosis.

Clinical Reference

1. Andersson M, Alvarez-Cermeno J, Bernardi G, et al. Cerebrospinal fluid in the diagnosis of multiple sclerosis: a consensus report. J Neurol Neurosurg Psychiatry. 1994;57(8):897-902
2. Fortini AS, Sanders EL, Weinshenker BG, Katzmann JA. Cerebrospinal fluid oligoclonal bands in the diagnosis of multiple sclerosis. Isoelectric focusing with IgG immunoblotting compared with high-resolution agarose gel electrophoresis and cerebrospinal fluid IgG index. Am J Clin Pathol. 2003;120(5):672-675

3. Thompson AJ, Banwell BL, Barkhof F, et al. Diagnosis of multiple sclerosis: 2017 revisions of the McDonald criteria. Lancet Neurol. 2018;17(2):162-173
4. Gurtner KM, Shosha E, Bryant SC, et al. CSF free light chain identification of demyelinating disease: comparison with oligoclonal banding and other CSF indexes. Clin Chem Lab Med. 2018;56(7):1071-1080
5. Saadeh R, Pittock S, Bryant S, et al. CSF kappa free light chains as a potential quantitative alternative to oligoclonal bands in multiple sclerosis. Neurology. 2019;92(15_supplement). doi:10.1212/WNL.92.15_supplement.S37.001

Performance

Method Description
The oligoclonal band (OCB) assay requires paired cerebrospinal fluid (CSF) and serum samples. Unconcentrated CSF and diluted serum are electrophoresed by isoelectric focusing. The separated immunoglobulins (Ig) are visualized by an IgG immunoblot, and OCBs that are present in the CSF and not in the serum are reported.(Package insert: SPIFE Touch IgG IEF Procedure. Helena Laboratories; 02/2024)

PDF Report
No

Day(s) Performed
Monday through Friday

Report Available
4 to 7 days

Specimen Retention Time
14 days

Performing Laboratory Location
Mayo Clinic Laboratories - Rochester Superior Drive

Fees & Codes

Fees
- Authorized users can sign in to Test Prices for detailed fee information.
- Clients without access to Test Prices can contact Customer Service 24 hours a day, seven days a week.
- Prospective clients should contact their account representative. For assistance, contact Customer Service.

Test Classification
This test has been cleared, approved, or is exempt by the US Food and Drug Administration and is used per manufacturer's instructions. Performance characteristics were verified by Mayo Clinic in a manner consistent with CLIA requirements.

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CPT Code Information

83916

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
OLIGS	Serum Bands	100755-8

Result ID	Test Result Name	Result LOINC® Value
2783	Serum Bands	100755-8