

PARANEOPLASTIC
ANTIBODY
PANEL,
SERUM/CSF

Orderable - PNAS: for serum/ PNACSF: for CSF

Turnaround Time: 7 days



Laboratory:
Clinical Immunology Lab



Requisition:
[CLINICAL IMMUNOLOGY
REQUISITION](#)



Method of Analysis:
Immunoblot.

Positive for anti Hu, Yo, Ri, amphiphysin, CV2, Ma2, SOX-1, Zic4 and Tr (DNER) by immunoblot will be reflexed to tissue indirect immunofluorescence (TIIF) assay (reported based on immunoblot).

Positive for anti-GAD65 by immunoblot will be reflexed to GAD65 ELISA.

Anti-titin and anti-recoverin antibodies will be determined by immunoblot only.



Test Schedule:
Batched analysis

Alternate Name(s):

Anti-Hu (ANNA-1)
Anti-Yo (PCA-1)
Anti-Ri (ANNA-2)
Anti-CV2 (CRMP5)
Anti-Ma2/Ta
Anti-Amphiphysin
Anti-Recoverin
Anti-SOX1
Anti-Titin
Anti-Zic4
Anti-GAD65
Anti-Tr (DNER)

Specimen:

Adult	Pediatric
5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube	0-2 years: 0.5 mL Red Microtainer 2-10 years: 2 mL Red top tube
EDTA, heparin or citrate plasma are also acceptable	
CSF samples will also be accepted. Suggest CSF be submitted with serum for testing.	

Collection Information:

Volume required for testing is 1.0 mL
Minimum volume is 0.5 mL

Reference Ranges:

Negative

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Interpretive Comments:

Paraneoplastic syndromes are a group of rare disorders; some of which are caused by autoimmune reactions against antigens co-expressed by cancer cells and neurons. Below are the most frequent cancers associated with paraneoplastic syndromes and autoantibodies.

Antibodies against	Associated Neurological Disorders	Frequently Associated Tumors
Hu (ANNA-1)	Paraneoplastic encephalomyelitis	Small cell lung cancer, neuroblastoma
Yo (PCA-1)	Paraneoplastic cerebellar degeneration	Ovarian cancer, breast cancer, uterine carcinoma
Ri (ANNA-2)	Paraneoplastic opsoclonus myoclonus ataxia	Neuroblastoma, Breast cancer
Ma2/Ta	Rhombencephalitis, paraneoplastic limbic encephalitis, brain stem encephalopathy	Germinal carcinoma of the testis (seminoma)
Amphiphysin	Stiff-person syndrome, Myasthenic syndrome	Breast cancer, small cell lung cancer
CV2 (CRMP5)	Limbic encephalitis	Small cell lung cancer, thymoma
Recoverin	Retinopathy	Small cell lung cancer
SOX1	Lambert-Eaton myasthenic syndrome	Small cell lung cancer
Titin	Myasthenia gravis	Thymoma
Anti-Zic4	Paraneoplastic cerebellar degeneration	Small cell lung cancer
Tr (DNER)	Paraneoplastic cerebellar	Hodgkin's lymphoma

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	degeneration	
GAD65	Stiff-person syndrome	Small cell lung cancer

Comments:

This test is available only to external clients.

Critical Information Required:

Each sample must be submitted with a clinical questionnaire completed by the treating physician, which should take no more than 10-15 minutes to complete.

Clinical Questionnaire

Dr. Adrian Budhram will review the provided clinical information for every positive neural antibody result, and contact the ordering physician to promptly review the result and aid in clinical-serological correlation.

Sample Stability:

Refrigerated: 14 days

Frozen: 30 days