SPECIALTY LABORATORIES

Newly Available Neurology Assays

ASSAY	CLINICAL APPLICATION	SPECIMEN REQUIREMENTS*
4011 Ganglioside Asialo-GM_1 Autoabs	Used to aid in the diagnosis of motor/sensory neuropathy. Asialo-GM_1 autoantibodies, in the absence of correspondingly high concentrations of GM_1 autoantibodies, identify a subset of patients with motor neuron disease exhibiting proximal muscle weakness in the early stages.	1 (0.5) mL Serum; Amb, Refrig, Frozen.
1441 Ganglioside Monosialic Acid Autoabs	GM_1 autoantibodies can be found in 55-80% of patients with immune-mediated motor neuron syndromes, including multifocal motor neuropathies and lower motor neuron syndromes and less frequently in sensorimotor syndromes. In patients with autoimmune motor neuropathies, GM_1 autoantibodies can be detected at greater than 100 units.	1 (0.5) mL Serum; Amb, Refrig, Frozen.
4006 Ganglioside GD_{1a} Autoabs	GD_{1a} autoantibodies are reported in patients with Guillain-Barré syndrome (GBS), dementia, inner ear disease, amyotrophic lateral sclerosis and peripheral polyneuropathy.	1 (0.5) mL Serum; Amb, Refrig, Frozen.
4041 Ganglioside GD_{1b} Autoabs	GD_{1b} autoantibodies that do not cross-react with GM_1 and asialo-GM_1 can be found in patients with sensorimotor axonal polyneuropathy and motor neuron disease accompanied by thyroid adenoma.	1 (0.5) mL Serum; Amb, Refrig, Frozen.
4043 Ganglioside GQ_{1b} Autoabs	GQ_{1b} autoantibodies are associated with the autoimmune demyelinating disease Miller Fisher syndrome (MFS), a GBS variant affecting upper motor neurons. The sensitivity of GQ_{1b} autoantibodies in MFS is ~ 95%. GQ_{1b} autoantibodies can cross react with other gangliosides in cases of peripheral neuropathy with paraproteinemia.	1 (0.5) mL Serum; Amb, Refrig, Frozen.
4058 Ganglioside Triple Evaluation • **GM_1 Autoabs** • **Asialo-GM_1 Autoabs** • **GD_{1b} Autoabs**	GM_1 autoantibodies can be found in 55-80% of patients with immune-mediated motor neuron syndromes, including multifocal motor neuropathies and lower motor neuron syndromes; GM_1 autoantibodies are less frequently reported in sensorimotor syndromes. Asialo-GM_1 autoantibodies, in the absence of correspondingly high concentrations of GM_1 autoantibodies, identify a subset of patients with motor neuron disease exhibiting proximal muscle weakness in the early stages. GD_{1b} autoantibodies that do not cross-react with GM_1 and asialo-GM_1 can be found in patients with sensorimotor axonal polyneuropathy and motor neuron disease accompanied by thyroid adenoma.	2 (1) mL Serum; Amb, Refrig, Frozen.
4056 Ganglioside Autoabs Evaluation • **GM_1 Autoabs** • **Asialo-GM_1 Autoabs** • **GQ_{1b} Autoabs** • **GD_{1a} Autoabs** • **GD_{1b} Autoabs** • **GM_2 Autoabs**	GM_1 autoantibodies can be found in 55-80% of patients with immune-mediated motor neuron syndromes, including multifocal motor neuropathies and lower motor neuron syndromes; GM_1 autoantibodies are less frequently reported in sensorimotor syndromes. Asialo-GM_1 autoantibodies, in the absence of correspondingly high concentrations of GM_1 autoantibodies, identify a subset of patients with motor neuron disease exhibiting proximal muscle weakness in the early stages. GD_{1a} autoantibodies are reported in patients with GBS, dementia, inner ear disease, amyotrophic lateral sclerosis and peripheral polyneuropathy. GD_{1b} autoantibodies that do not cross-react with GM_1 and asialo-GM_1 can be found in patients with sensorimotor axonal polyneuropathy and motor neuron disease accompanied by thyroid adenoma. GM_2 autoantibodies can be found in the 50% of paraproteinemic neuropathy patients who are MAG- and SGPG-negative. Increased concentrations of one or more antibodies in this evaluation can be associated with neuropathies secondary to infectious, inflammatory, paraneoplastic or systemic autoimmune diseases.	2 (1) mL Serum; Amb, Refrig, Frozen.
4012 Ganglioside GM_2 Autoabs	GM_2 autoantibodies can be found in the 50% of paraproteinemic neuropathy patients who are MAG- and SGPG-negative.	1 (0.5) mL Serum; Amb, Refrig, Frozen.
4051 MAG & SGPG Evaluation	High concentrations of IgM Myelin-Associated Glycoprotein (MAG) autoantibodies are found in ~50% of patients with peripheral neuropathies accompanied by IgM monoclonal gammopathies. Autoantibodies to SGPG (sulfoglucuronyl paragloboside) can be detected in sensory and sensorimotor neuropathies, Chronic Inflammatory Demyelinating Polyneuropathy (CIDP) with or without gammopathy, GBS and, to a lesser extent, motor neuron disease.	2 (1) mL Serum; Amb, Refrig, Frozen.

*For complete collection instructions call Client Services at 800-421-4449.

Turnaround Time for all tests listed is 1-4 Days

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1926 MAG IgM Autoabs	High concentrations of MAG autoantibodies are found in ~50% of patients with peripheral neuropathies accompanied by IgM monoclonal gammopathies. Lower concentrations of MAG IgM autoantibodies can also be found in patients with inflammatory neuropathies, multiple sclerosis, systemic lupus erythematosus and healthy individuals.	1 (0.5) mL Serum; Amb, Refrig, Frozen.
1186 Neuronal Nuclear Autoabs (Hu)	CNS paraneoplastic syndromes (neurological disorders which occur as a remote effect of a cancer) are generally thought to be the result of an autoimmune process in which autoantibodies to antigens expressed in tumor tissue are directed against similar antigens of the central nervous system. Neuronal nuclear autoantibodies (Type 1 ANNA; also known as ANNA-1 and Hu autoantibodies) are found in a number of paraneoplastic syndromes, including subacute sensory neuropathy (SSN), paraneoplastic encephalomyelitis (PN) and paraneoplastic cerebellar degeneration (PCD) and are associated with small-cell lung cancer.	1 (0.5) mL Serum; Amb, Refrig, Frozen.
1186C Neuronal Nuclear Autoabs (Hu) CSF	See #1186 Neuronal Nuclear Autoabs (Hu) for clinical application.	3 (2) mL CSF; Amb, Refrig, Frozen.
1171 Paraneoplastic Syndrome Eval • **Yo Autoantibodies** • **Hu Autoantibodies** • **Ri Autoantibodies**	In paraneoplastic cerebellar degeneration (PCD), a diffuse loss of cerebellar Purkinje cells signals the presence of an underlying, frequently occult, neoplasm. PCD is seen most frequently in postmenopausal women who present with sudden onset of ataxia, dysarthria or nystagmus. In women with PCD and type 1 Purkinje cell (Yo) autoantibodies (PCA-1), the associated malignancy is most often gynecologic (especially ovarian) or breast cancer. ANNA-1 are most commonly seen in the paraneoplastic syndromes of subacute sensory neuronopathy (SSN) and paraneoplastic encephalomyelitis (PEM) associated with small-cell lung cancers SCLC, but are also occasionally found in SSN/PEM patients who have other malignancies. Neurologic symptoms generally precede or coincide with the detection of a tumor in SSN/PEM. Type 2 neuronal nuclear (Ri) autoantibodies are associated with opsoclonus-myoclonus syndrome and often seen in cases of breast cancer, small cell lung cancer and gynecologic cancer.	2 (1) mL Serum; Amb, Refrig, Frozen.
1171C Paraneoplastic Syndrome Eval CSF	See #1171 Paraneoplastic Syndrome Eval for clinical application.	3 (2) mL CSF; Amb, Refrig, Frozen.
1170 Paraneoplastic Syndrome Eval w/ VGCCA • **Yo Autoantibodies** • **Hu Autoantibodies** • **Ri Autoantibodies** • **Voltage-Gated Calcium Channel IgG Autoabs**	See #1171 Paraneoplastic Syndrome Evaluation for clinical application of Yo, Hu and Ri autoantibodies. Voltage-gated calcium channel (VGCC) autoantibodies are associated with Lambert-Eaton myasthenic syndrome (LEMS) in conjunction with SCLC.	2 (1) mL Serum; Amb, Refrig, Frozen.
1187 Purkinje Cell Cytoplasmic Autoabs (Yo)	In PCD, a diffuse loss of cerebellar Purkinje cells signals the presence of an underlying, frequently occult, neoplasm. PCD is seen most frequently in postmenopausal women who present with sudden onset of ataxia, dysarthria or nystagmus. In women with PCD and PCA-1, the associated malignancy is most often gynecologic (especially ovarian) or breast cancer.	1 (0.5) mL Serum; Amb, Refrig, Frozen.
1187C Purkinje Cell Cytoplasmic Autoabs (Yo) CSF	See #1187 Purkinje Cell Cytoplasmic Autoabs (Yo) for clinical application.	3 (2) mL CSF; Amb, Refrig, Frozen.
1196 Ri Autoantibodies	Type 2 neuronal nuclear (Ri) autoantibodies are associated with opsoclonus-myoclonus syndrome and are often seen in cases of breast cancer, small cell lung cancer and gynecologic cancer.	1 (0.5) mL Serum; Amb, Refrig, Frozen.
1196C Ri Autoabs CSF	See #1196 Ri Autoantibodies for clinical application.	3 (2) mL CSF; Amb, Refrig, Frozen.
4046 SGPG Autoabs	Autoantibodies to SGPG (sulfoglucuronyl paragloboside) can be detected in sensory and sensorimotor neuropathies, CIDP with or without gammopathy, GBS and to a lesser extent motor neuron disease.	1 (0.5) mL Serum; Amb, Refrig, Frozen.

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