

Anti- Ganglioside Antibody, Serum

New Target Antigens in Guillain - Barre Syndrome (GBS) & Related Disorders

- Gangliosides comprises 10 – 20% of the total lipid of the outer neuronal membrane layer, ten times more than in non-neuronal cells
- Form antigenic targets for anti- ganglioside antibodies in various forms of GBS
- Clinical features of GBS are composed of different subtypes & each subtype is closely associated with specific anti-ganglioside antibodies

Target antigens of anti- ganglioside antibodies & associated clinical features

Antigens	Disease association / prevalence
GM1	Multifocal motor neuropathy (40-70%), Guillain Barre syndrome (22 -30%)
GM2	Multifocal motor neuropathy, Guillain Barre syndrome & variants
GM3	Multifocal motor neuropathy
GD1a	Guillain Barre syndrome & variants
GD1b	Sensory neuropathy
GT1b	Guillain Barre syndrome & variants
GQ1b	Miller Fisher syndrome(90%)

GBS & Anti- Ganglioside Antibodies: Molecular Mimicry - Key Pathogenic Mechanism

- About two-third of the patients experience a preceding airway or gastrointestinal infection, the later being frequently caused by *Campylobacter jejuni*
- Anti-ganglioside antibodies arise through an immune response against *C. jejuni*

Anti- Ganglioside Antibody Tests @ Metropolis

- Method of detection: Immunoblot
- Detects IgG antibodies in human serum against seven antigens including GM1, GM2, GM3, GD1a, GD1b, GT1b & GQ1b

Sample Requirement: 1 ml serum
Test Schedule: Tue - 9 am
Reported on: Next day at 5 pm