

ANTI-MAG
(MYELINE ASSOCIATED
GLYCOPROTEIN)



- MAG is a type I transmembrane glycoprotein containing five Ig-like domains in its extracellular domain.
- MAG, a minor component of myelin in the central and peripheral nervous system, has been implicated in the formation and maintenance of myelin.



INTRODUCTION

- Autoimmune responses of the peripheral nervous system, recognized as *peripheral neuropathies*, are manifestations associated with autoantibodies against various neural glycoconjugates.
- These neuropathies can be acute, chronic, involve axonal degeneration, or demyelination.



- Autoimmune neuropathies can be further divided into monoclonal gammopathies and polyclonal inflammatory polyneuropathies like *Guillain-Barré syndrome*, *Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)*, *multifocal motor neuropathy (MMN)*, and *paraneoplastic neuropathies*.



- Neuropathies associated with anti-MAG with IgM paraproteinemia are usually a heterogeneous disease group, slowly progressive with evidence of demyelination and a variable degree of axonal loss usually associated with gait ataxia.



- Of all peripheral neuropathy cases with IgM paraproteinemia, 50% possess anti-MAG antibodies⁸.
- It is perceived that these autoantibodies might interfere with the process of myelination, with myelin maintenance, or with axon-Schwann cell interactions.
- Hence, the detection of these autoantibodies is useful for the clinician, as it suggests active demyelination in a peripheral neuropathy.



- Detection of IgM autoantibody against myelin associated glycoprotein (MAG) suggests active demyelination in peripheral neuropathy. The possibility of MAG antibody involvement in a suspected neuropathy may essentially be ruled out if a MAG IgM negative result is obtained.



- TEST METHOD : ELISA
- SAMPLE : SERUM
- COST :
- SCHEDULE :
- TAT :

