Myelin associated glycoprotein MAG

General:

The myelin associated glycoprotein (MAG; Isoform a: Mr 69 kDa, Isoform b: Mr 63.9 kDA; Chromosome 19q13.1) is a strongly glycolyzed type 1 membrane protein belonging to the immunoglobulin-super-family. The role of MAG is possibly that of an adhesion molecule. The immunoreactive epitopes are mainly located on the carbohydrate part.

MAG autoantibodies seem to be involved in the pathogenesis of neuronal lesions. Deposits of antibodies (anti-MAG) and complement are found in the myelin sheath of affected nerves.

Occurrence: Anti-MAG IgM antibodies are detected in patients with polyneuropathy almost solely in connection with a monoclonal IgMgammopathy, rarely in IgG or IgA-gammopathies.

Associated gammopathies can be either malignant like macroglobulinemia Waldenström or non-malignant monoclonal gammopathy of unknown significance. Though studies have shown that 10-20% of the patients with a non-malignant monoclonal gammopathy of unknown significance develop either Hirschsprung disease or a multiple myeloma. Non-malignant monoclonal gammopathy of unknown significance is around 200 times more frequent than a malignant gammopathy. The prevalence of polyneuropathies in patients with Hirschsprung disease is 7-50%, in patients with non-malignant monoclonal gammopathy of unknown significance about 16–71%.

Indication:	Polyneuropathy in association with a monoclonal gammopathy (Hirschsprung disease of non-malignant monoclonal gammopathy of unknown significance) type IgM.
Material:	1 ml serum
TAT:	7-10 days*
Method:	IFT
Units:	Titer
Ref.- range:	adult : <1:10

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit http://www.fml-dubai.com/parameter-listings/

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