

Mistletoe lectin antibodies

General:

Treatment with mistletoe extracts is the most frequent complementary cancer therapy. The mistletoe effect is considered to be a stimulation therapy of the immune system by mistletoe lectins (ML-1). Mistletoe lectins show an immunostimulatory effect at optimal dosage, in over-dosage they can show immunosuppressive effects. To use the immunostimulatory effect therapeutically, antibodies against mistletoe lectin (produced under therapy) should be tested. Antibodies against mistletoe lectins occur approx. 2-4 weeks after beginning the therapy.

If no antibody response is detected after 6 weeks, an increase of the dosage should be considered. In most cases ML-1 antibodies of subclasses IgG1 and/or IgG3 are found as a sign of stimulation of B-lymphocytes by TH1- lymphocytes. If antibodies of the IgE class or subclasses IgG2 or IgG4 are also detected during a mistletoe therapy, a non tumor cell-lytic (frustrane) TH2-lymphocyte stimulation is expected.

Principle of therapy monitoring: At the beginning of the therapy (within the first four weeks), the dosage is increased stepwise, until a clear local reaction of approx. 5 cm in diameter occurs. This dosage is used continuously under control of the lectin antibodies (incl. the subclasses), until antibodies of the classes IgE, IgG2 or IgG4 appear (stimulation of non tumor cell-lytic TH2 lymphocytes). In this case, a readjustment to a lectinreduced mistletoe preparation or a therapy break has to be considered.

The following tests are available:

- **Mistletoe lectin antibodies: mistletoe IgA, mistletoe IgG, mistletoe IgE, mistletoe IgM**

Indication: Therapy monitoring

Preanalytics: send immediately or freeze

Material: 1 ml serum

TAT: 7-10 days*

Method: EIA

Ref.- range: see report

- **Mistletoe lectin IgG subclasses: mistletoe IgG1, mistletoe IgG2, mistletoe IgG3, mistletoe IgG4**

Indication: Therapy monitoring, testing of over-stimulation or therapy failures

Preanalytics: send immediately or freeze

Material: 1 ml serum

TAT: 7-10 days*

Method: EIA

Ref.- range: see report

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