

# Interleukin 1 polymorphism

## General:

Periodontal diseases present a wide range of clinical variability and severity. Both environmental and genetic factors contribute to individual variations in the etiology, predisposition and progression of periodontal diseases. Individual susceptibility seems to be of major importance in determining the manifestation and progression of the disease. Bacterial challenge can initiate the disease but the degree of extension and severity of disease are related to certain host factors, and are mediated mainly by inflammatory cytokines.

The polymorphisms in genes of the IL-1 family are associated with severe adult periodontitis and may be a risk factor for severe periodontitis. Interleukin plays a major role in regulation of the inflammatory response in periodontal tissues. Its regulation is expressed by the genes IL-1A-889 and IL-1B +3954. By general agreement, subjects with at least one variant allele of each IL-1A and IL-1B were designated as 'genotype positive'. This is the composite genotype suggested to be a susceptibility factor for an enhanced periodontitis risk.

The following tests are available:

- **Periodontitis risk test**

Indication: early onset of periodontitis (prepubertal, juvenile and rapid progressive periodontitis), severe generalised adult periodontitis, severe marginal periodontitis with systemic diseases

Material: Gingival swab

TAT: 7-10 days\*

Method: PCR

Units: see report

Ref.- range: see report

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit

<http://www.fml-dubai.com/parameter-listings/>