

T Cell Activation Panel

General information

Assay principles: This test is usually done in conjunction with lymphocyte subsets surface markers (ID), in which case a separate sample is not required. This assay measures the levels of CD25 and HLA-DR expression on CD4+ T cells which have been activated from an immune response to a pathogen. Activated T cells are a hallmark of the combined immunodeficiency, Omenn's syndrome. Rare immunodeficiencies exist where activation markers can be absent from immune cells e.g. HLA-Dr in Bare Lymphocyte Syndrome (type 2) and CD25 in IL-2 receptor deficiency. More specifically, analysis of CD25 expression may be useful in the diagnosis of IPEX syndrome.

Assay interferences: Older samples may exhibit loss of surface antigens and therefore the sample should be as fresh as possible.

Laboratory information

Analyte: T Cell Activation Panel

Units: %

Specimen type: Peripheral blood - EDTA

Frequency of analysis: Dependent on clinical indication

Turnaround times: 1-2 routine working days, Assay run daily Monday to Friday 09:00-15:00

Specimen transport: At room temperature

Additional/special requirements: Note that samples should be received in the laboratory no later than 3pm on a Friday. Samples should be kept at room temperature.

Method: Flow Cytometry

Participation in EQA Scheme: N/A

Clinical information

Interpretation: Use of this panel in the investigation/monitoring of immunodeficiency should be discussed with the appropriate Consultant Immunologist (adult or paediatric).

ICE reference: TACT

(Last updated April 2021)