

## ELISPOT Assay

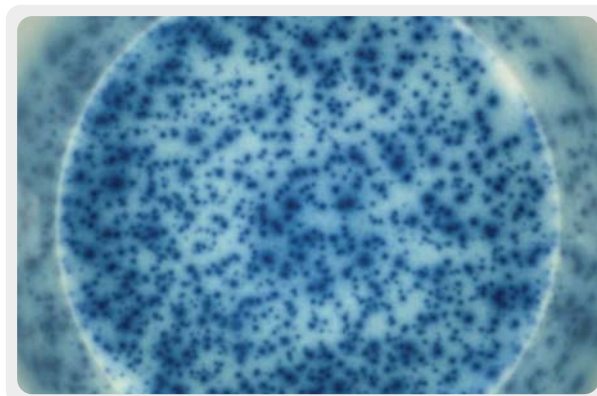
Thymed offers the ELISPOT assay for both research and clinical studies. Useful for analysis of antibody secreting cells, the ELISPOT assay has been modified to detect cells secreting other biomarkers such as cytokines, chemokines and granzymes in response to stimulation with antigen. The assay helps you define and visualize antigen-specific immune responses to your novel vaccine, sub-unit protein or individual or pooled epitope(s), thus enhancing your decision-making ability and providing crucial information for further development, as well as identifying possible companion diagnostics or biomarkers. Uses of the ELISPOT assay include:

- Assessing frequency of antigen-specific cell populations
- As a surrogate measure of antigen-specific cytotoxic T-cell responses
- Epitope mapping
- Epitope validation
- Screening of antibody-secreting cells
- Useful in analysis of rare cell population
- Useful in monitoring antigen-specific T- or B-cell immune responses within the context of a clinical trial

In the case of T-cells, secreted cytokine, chemokine or granzyme is captured by antibody bound to the membrane surface of a 96 well plate. Detection requires binding of a secondary antibody coupled to an enzyme, with subsequent addition of a chromogen to bring about a colourimetric reaction, much like an ELISA. Coloured spots, representing biomarker - secreting T-cells are identified and counted using an automated ELISPOT reader.

### The Essentials

- **Material Requirements** – fresh or frozen PBMC or lymphocytes
- Suitable for **Preclinical & Clinical Research**
- Allows detection of **Antigen-Specific** T-cell (cytokine) or B-cell (antibody) responses
- Useful in **Epitope Validation**
- Limit of detection < 1 in 100,000 cells
- Ex vivo or in vitro assay
- Can be HLA independent



Located 45mins from Frankfurt International Airport, in the heart of Europe, Thymed boasts excellent logistics. Thymed's well-equipped, state-of-the-art laboratories and specialty testing services are ISO 9001 certified and conform to GLP.