



# Diaclone DIAplex

Multiplex Bead Based Immunoassays

# Diaclone

## Diaclone's Immunology Products

Fast Track Your Research



Monoclonal Antibody



ELISA



ELISpot



DIAplex

With over 25 years of experience and expertise, high quality has become the hallmark of the Diaclone Immunology products, firmly establishing us as a centre of excellence in Monoclonal Antibody research and Immunoassay Kit development. Diaclone is now distributed exclusively by Mbioscience Solutions in Malaysia.

### DIAplex: Multiplexing with Flow Cytometry

Diaclone DIAplex is a sensitive multiplex fluorescent bead-based immunoassay for the simultaneous quantification of multiple analytes from a single sample by flow cytometry.

### Versatility and Simplicity

- Measure up to 10 analytes simultaneously from a small sample volume.
- Choose from ready configured detection panels or create your own panel.
- Simple to use software provided free of charge.
- Test either serum, plasma or cell culture supernatants.
- Compatible with most flow cytometers.
- Suitable for use in most areas of Immunological research including Cancer, Autoimmunity, Infection, Transplantation and Vaccine development.
- NIBSC standard calibration.
- Robust validation & accurate quantitative results.

### Diaclone DIAplex Complete Panel

Panel Catalogue No. (Anti-Human)	Th1 880.110.004 4-plex	Th2 880.120.003 3-plex	Th1/Th2 880.140.007 7-plex	Inflammation 880.130.004 4-plex	Th1/Th2/Inflammation 880.100.010 10-plex
IFN $\gamma$	•		•		•
IL-1 $\beta$				•	•
IL-2	•		•		•
IL-4		•	•		•
IL-6		•	•		•
IL-8				•	•
IL-10		•	•		•
IL-12p70	•		•		•
IL-17A				•	•
TNF $\alpha$	•		•	•	•

## Assay Procedure

1.

- Antibodies highly specific to the analytes to be detected are coupled to **fluorescently labelled detection beads**.
- Each bead is analogous to an individually coated well in an ELISA providing a capture surface for a specific analyte.



2.

- Singleplex or more (multiplex) populations of the beads are combined in suspension with the sample or standard under test.
- Any analytes present in the sample will bind to the specific antibodies linked to the fluorescent beads.



wash

3.

- A **biotin-conjugated antibody** mixture is then added which binds to any analytes captured by the first antibodies.



wash

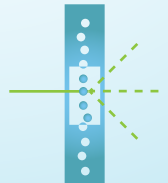
4.

- **Streptavidin-Phycoerythrin (PE)** is added, which binds to the biotin conjugates and emits a yellow fluorescent signal.



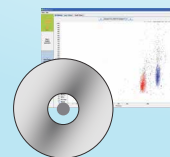
5.

- The unique size and fluorescent signature of each bead is differentiated by flow cytometry.



6.

- Following sample data acquisition using a flow cytometer, analyte concentration in the test sample is calculated simply by using the DIAplex analysis software provided.



[www.diaclone.com](http://www.diaclone.com)