

IgDquant EIA

- Quantitative measurement of immunoglobulin D
- Sensitivity (below 0.1 mg/L) better than with turbidometry
- Quantification is more accurate than with RID
- Linear detection between 0 and 500 mg/L
- Less than 1% cross reactivity with other immunoglobulin classes

Ani Lab systems' IgDquant EIA kit quantifies immunoglobulin D present in human serum or plasma. The sensitivity is better than with turbidometry and the quantification is more accurate than with radial immunodiffusion (RID)

Discovered in 1965, IgD is a unique immunoglobulin with a concentration in serum far below those of IgA, IgG and IgM but much higher than that of IgE. Little is known about the normal function of IgD, and few clinical signs or symptoms are associated with its absence.

Hyper Immunoglobulin D Syndrome (HIDS) has been reported as a major case of elevated level of IgD. HIDS is found in patients with unexplained periodic fever and joint disease. High level of IgD is also found in IgD myeloma, diverse infections (tuberculosis, leprosy, aspergillosis), AIDS, rheumatoid polyarthritis, Hodgkin's disease, diabetes, cirrhosis, Mediterranean family fever, tobacco smoking and pregnancy.

Immunoglobulin D (IgD) deficiency is a defect of humoral immunity that is characterized by abnormally low serum levels of IgD.

Serology - an important tool

Traditionally, IgD level in serum has been measured with the other classes of immunoglobulin since low levels of IgD may be associated with the presence of other immune disorders. In case of IgD deficiency discovery, the patient should be referred to an allergist or clinical immunologist to help exclude other more serious related conditions.

Because of the susceptibility to proteolysis, radial immunodiffusion (RID) may overestimate IgD level, whereas turbidometry is not sensitive enough for low concentration of proteins. Therefore Ani Lab systems's IgDquant EIA offers a robust and reliable tool for the quantification of human IgD in serum or plasma.

Ani Lab systems' IgDquant EIA kit will be available with CE-mark in February 2006.

Procedure

Dilute sample 1:100

Pipette 100 µl of ready-to-use calibrators and controls

Pipette 10 µl diluted sample + 90 µl sample diluent.

Incubate 60 min at 37°C
Wash

Add 100 µl conjugate
Incubate 60 min at 37°C
Wash

Add 100 µl TMB-substrate
Incubate 30 min at RT in dark
Add 100 µl stopping solution
Measure at 450 nm