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Abstract
ELISA is the most widely adopted method for detection and quantification of low analyte concentrations. This traditional technology offers good sensitivity, selectivity and assay versatility; however, it has certain disadvantages such as limited dynamic range and limited throughput. In addition, the numerous required wash-steps limit its ability to measure low affinity antibodies. The PerkinElmer AlphaLISA™ platform does not face these limitations. It does not require any wash steps. Assay development is simple and fast and turnaround time as well as total assay time are significantly reduced. These low variability assays are easy to miniaturize and automate enabling an efficient High Throughput Screening setup.

The 8 New No-Wash Immunoassay Kits

VEGF
Amyloid β1-40
Amyloid β1-42
Insulin
Human IgG
EPO
HIV p24
TNFα

Data Analysis (TNFα kit)

The assay can be performed in various cell culture media even though some of the media contain competing lecithin (e.g. RPMI).

Using Cell Culture Media and Serum (TNFα kit)

The assay can be performed in serum with limited effect on the Lower Detection Limit.

Sensitivity and Selectivity (TNFα kit)

Effect of analyte volume on the TNFα assay in 50 µL. (dilution in analyte in AlphaLISA ImmunoAssay Buffer).

No cross-reactivity observed up to 150 ng/mL of human TNFα, rat or bovine TNFα.

Summary and Conclusions

AlphaLISA is the new ELISA replacement platform with:

- No-wash steps (homogeneous assays)
- Wide dynamic range
- High sensitivity

Miniaturization is possible with this technology

With these new kits, the AlphaLISA technology is even more accessible to increase the accessibility of AlphaLISA technology to more researchers.

Kits Available

Catalog numbers

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<th>Analytes</th>
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Many other kits are coming soon!