The ELISA Encyclopedia (2004-2015) defines Enzyme-linked immunosorbent essay (ELISA), also referred to as an enzyme immunoassay (EIA), as a biochemical technique that is used primarily in immunology to detect the presence of an antibody or an antigen in a sample. ELISA has been widely used in various industries such as ELISA application in food industry, as a diagnostic tool in medicine and plant pathology as well as a quality-control check. In detecting an antibody or antigen in a sample using ELISA, a given amount of antigen is affixed to a surface, followed by an addition of a specific amount of antibody thereby binding with the antigen. The antibody, in this case, is linked to an enzyme, and in the last step a substance is added that the enzyme can convert to some detectable signal, always a color change in a chemical substrate (ELISA Encyclopedia, 2004-2015).

What makes ELISA different from other antibody-based assays is its ability to separate specific and non-specific interactions that occur via a serial binding to a solid surface, which in many cases is a polystyrene multiwall plate, and the quantitative results are can always be achieved (NeoScientific, 2015). ELISA is efficient as it is quick and very simple to carry out; besides, they are designed to handle huge numbers of samples in parallel. This makes ELISA’s application in various diagnostic and research targets very popular. More information about ELISA is explained subsequently below, as well as explanations on the different types of Elisa kits.

Elisa Test Kits Suppliers

The majority of Elisa test kits suppliers manufacture their diagnostic kits. The suppliers can be found in leading e-commerce websites such as NeoScientific. Besides, the suppliers have brought to the market test kits with the latest technology with a non-radioactive origin for Elisa; hence can be used widely in clinical laboratories and research labs. The prices of the Elisa test kits vary depending on the customer’s order. NeoScientific, for example, has 13 types of Elisa Kits including Human ELISA kits, Mouse ELISA kits, Mouse ELISA kits, Canine ELISA kits and 9 more others. A human ELISA kit, for example, named Human ZPI Elisa kit (Protein Z Dependent Protease Inhibitor) goes for $495 (NeoScientific, 2015). Note that Elisa Test Kits suppliers are very much available in Asia and Pacific, America and Europe.
Elisa Test Kits Manufacturers

Seasoned elisa test kits manufacturers are identified with the kind of immunoassay kits they bring to the market, a majority of which are well designed, tested, and optimized for a maximum level of performance in analyte quantification. The commonly identified kits with great performance include Quantikine hs, Quantikine IVD, QuantiGlo, Cell-Based ELISA kits and many more. These types depend on the analytes and species they are going to be used for, such as in humans, primates, rats and porcine. However, choosing the best manufacturer for the elisa test kits to buy from can be tricky. Quality test kits depend on how well the manufacturer has met all the stringent manufacturing and quality control measures that guarantee the best performance and consistency. Producing a high-quality ELISA therefore, depends on optimization during the product development.

NeoScientific, being a leading manufacturer of all types ELISA test kits, has the best prices for all ELISA test kits customers. Customers are able to make product orders on site, with a stand by customer support system to respond to all your ELISA search queries.

Elisa Reader

Elisa readers are essentially used to detect and process biological and chemical data using absorbance in microtiter plates. These instruments are widely used in research, bioassay validations quality control and manufacturing in pharmaceutical and biotechnological industries as well as academic institutions. Choosing the right elisa reader depends on three considerations; throughput, flexibility, and cost. A majority of Elisa reader’s application in pharmaceutical industries depend on its throughput, while for flexibility purposes, an absorbance reader for ELISAs, a single-mode instrument, is the best choice. However, some readers have been equipped with additional features such as built-ins like incubators and plate shakers that cost higher than the average readers.

Elisa Kits for Cytokines

Cytokines are essential to cell signaling molecules to the human body’s response to various human health encounters such as infections, inflammation, cancer, and trauma. Efficient Elisa Kits for Cytokines can cover all these targets in several species and various sample types as well. NeoScientific (2015) propose the Single ELISArray Kits to be effective due to its ability to
quantitatively measure the amount of an individual cytokine using the ELISA. The best elisa kits for cytokines available in the market today are coated with protein-specific capture antibodies; the antibodies are thoroughly screened to identify the best capture and detection antibodies. The kits come with a high-sensitive, good linearity, and low background hence providing reliable and reproducible cytokine results. Advantages of using the common single ELISArray Kits include their high performance due to low background, high-sensitivity and linearity, easy to use as only the elisa plate readers is required, broad menu category available for over 700 targets, validated for typical sample types such as serum, plasma and lysates, optimized for sensitive, accurate and consistence performance and much more.

We have a separate essay dedicated to Elisa kits for Cytokines that you can find here: http://neobiolab.com/research/elisa-kits-for-cytokines

HBsAg Elisa Kit

HBsAg Elisa Kit is a diagnostic kit used for in vitro qualitative detection of hepatitis B surface antigen (HbsAg) in human serum or plasma (heparin citrate or EDTA). This test kit uses the monoclonal and polyclonal antibodies to detect the elevated levels of HBsAg in serum or plasma selectively. However, the tests that are non-reactive by HBsAg ELISA test are considered negative for HBsAg, while specimens with a positive reaction ought to be retested in duplicate. In cases where there’s a repeat reactive reaction, the specimen should be confirmed HBsAg reactivity with validated confirmatory reagents. Only confirmed positive specimens are considered to contain HBsAg.

Parasitology Elisa Kits

Parasitology Elisa Kits are used to detect the presence of parasites in biological samples. However, the speed in which the parasites are identified in the samples makes its treatment fast enough. The common Parasitology elisa kits available in the market include ANA Screen kits, ENA profile kits, Sm ELISA kits, Cardiolipin kits, Mitochondria kits and PR3 ELISA kits.

Infectious Disease Elisa Kits

Infectious Disease elisa kits are essentially used to carry out ELISA tests on virology, bacteriology, fungi and much more. These kits are available for different infectious diseases
such as HCV, HIV, Influenza, and rubella. Note that these ELISA kits can widely be used in offices, hospitals and laboratories to carry out the tests. For example, the HIV 1, 2 ELISA assay kit is designed and uses as an aid for the screening of blood donors, and or as an aid in the diagnosis of clinical conditions related to infection with HIV-1 and HIV-2.

Elisa Test Kits for Allergens

Elisa Test Kits for Allergens are used to test for allergens in human food. Gluten, for instance, is a common allergen in the United States, 6 percent of people in the United States affected by gluten sensitivity in this case. Gluten is a combined water-insoluble protein (gliadin and glutenin) which is found mainly in seeds of wheat, rye, and barley. Gluten sensitive people tend to show symptoms of fatigue, anemia, dermatitis, bowel irritability among others, as a result of ingested gluten. ELISA Test Kits for gluten and gliadin analytical testing are available in the market today.

HCV Elisa Test

An HCV Elisa Test is the diagnosis of the hepatitis C virus (HCV) infection that is screened by anti-HCV ELISA and confirmed by recombinant immunoblotting assay (RIBA) or HCV RT-PCR. However, in common HCV Elisa Tests to patients, liver function tests show increased levels of hepatic enzymes in patients with positive HCV RT-PCR but negative anti-HCV. These results translate to an early phase of chronic hepatitis C, where continuous follow-up is recommended.

References
