



Diagnostic Enzymes

Professional Enzymes Manufacturer And Supplier

Creative Enzymes Inc.

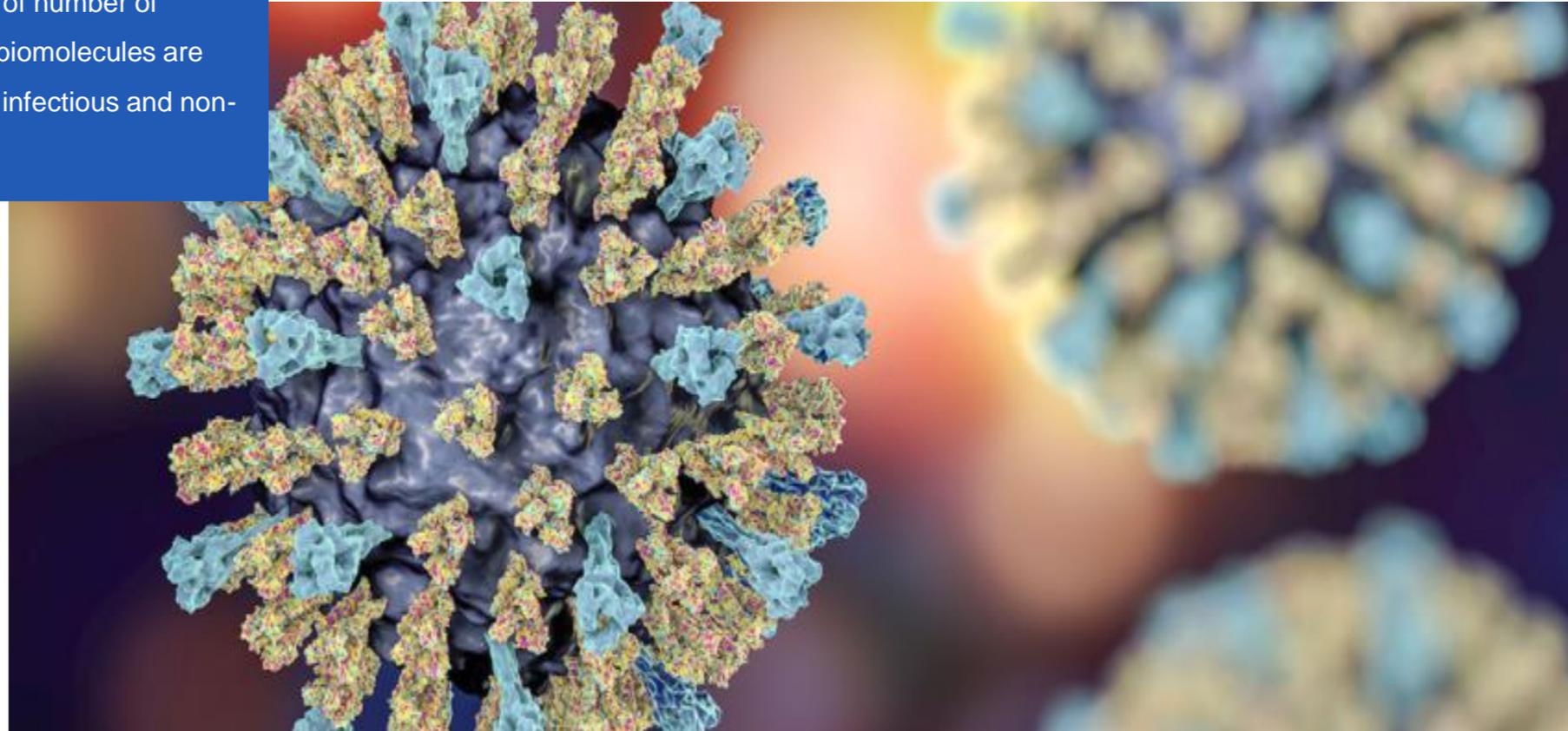


What is a diagnostic enzyme?

Diagnostic enzymes refers to the enzymes that are used directly or as components of the assay system for the determination of number of substances. Changes in the concentrations of various biomolecules are indications of abnormal metabolic activities, infections, infectious and non-infectious diseases and inflammatory conditions.

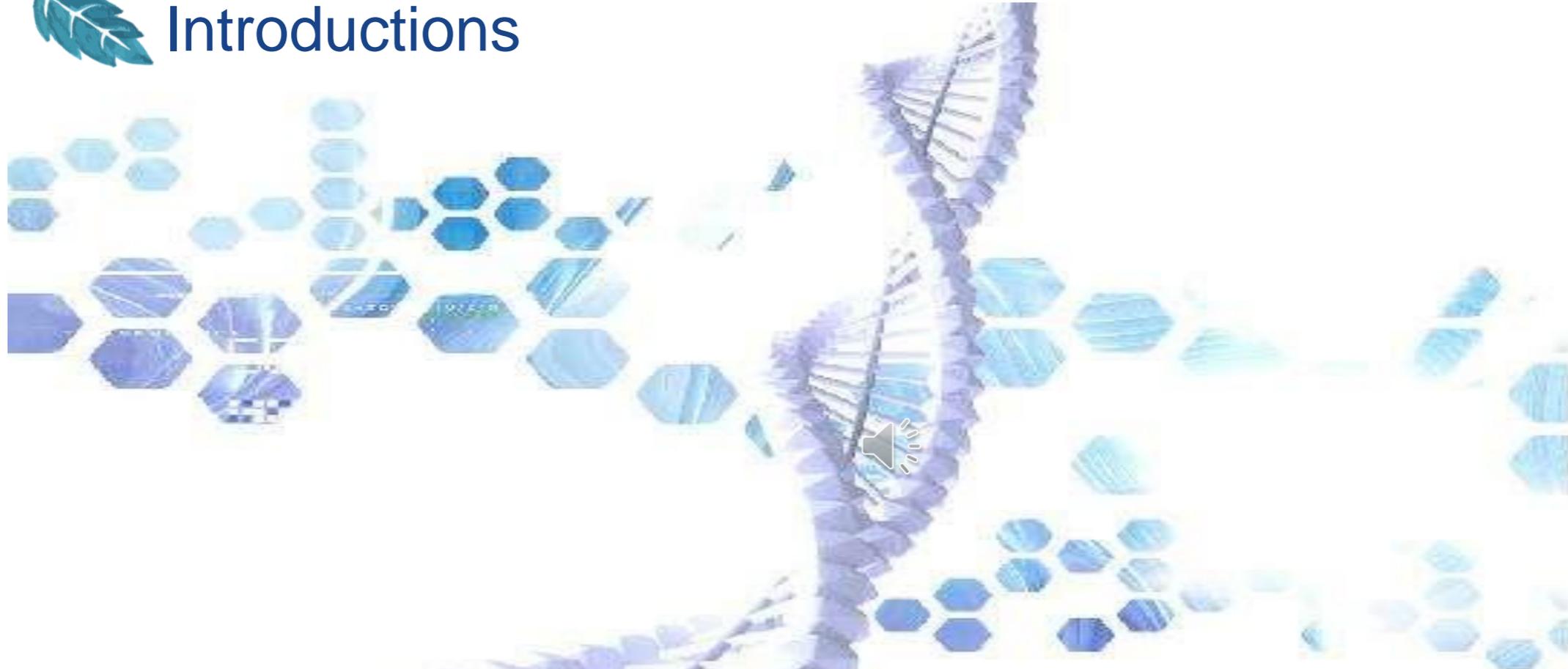
Application

Diagnostic enzymes are used to detect and quantify certain substances. As a marker in an enzyme immunoassay (EIA) system, clinical laboratories usually use many alternative techniques for diagnosis, including electrophoresis, chromatography, isoelectric focusing, etc.





Introductions



Rapid and accurate diagnosis of critical diseases and their appropriate treatment are the primary factors that promote optimal clinical outcomes and general public health. Enzymes have remarkable biocatalytic properties, and because of this, they are extensively used in diagnostics of various diseases. Many enzymes are preferred markers for the detection of various diseases such as jaundice, myocardial infarction, neurodegenerative disorders, cancer, and so forth. Enzymes provide insights into various diseases by diagnosis, prognosis, and assessment of response therapy.



Reasons for applying diagnostic enzymes



The method for determining enzyme activity has better sensitivity and accuracy.

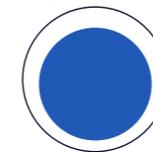
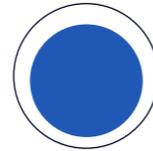
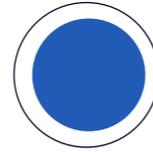
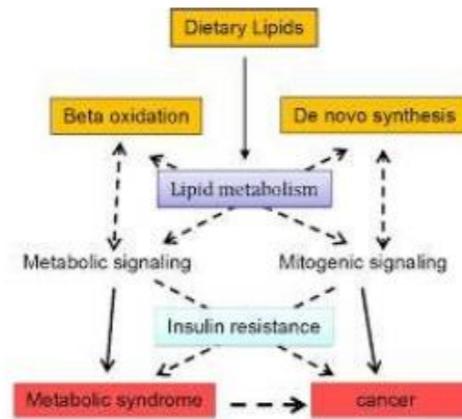


Changes in enzyme activity can be earlier than clinical signs or other diagnostic indicators.



Diagnostic Enzymes for Blood Lipid Metabolism

LIPID METABOLISM



Enzymes which are involved in the metabolism of lipids are being extensively studied. **Creative Enzymes** provide a wide range of blood lipids related enzyme products from different sources to help your research. We can provide you with cholesterol esterase, cholesterol oxidase, cholesterol dehydrogenase, glucose-6-phosphate dehydrogenase, hexokinase.





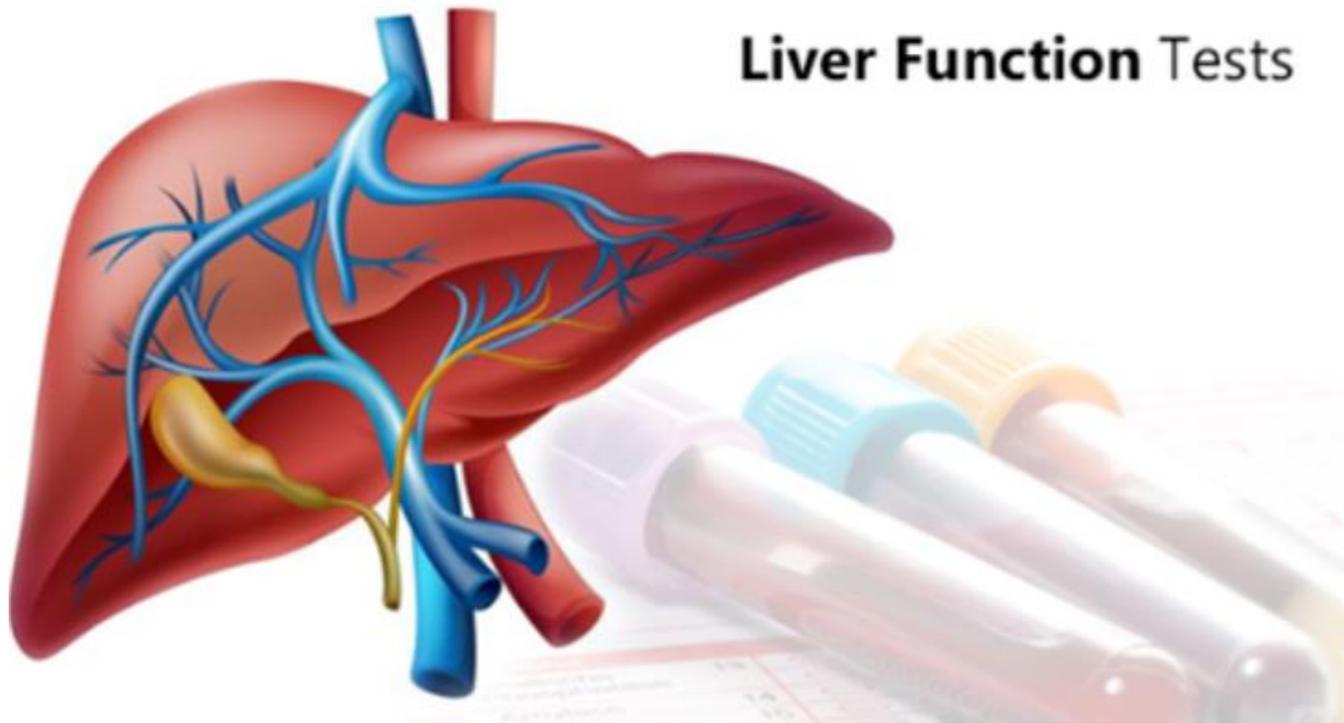
Diagnostic Enzymes for Diabetes Diagnosis



Blood sugar test serves as the rapidest and most straightforward means to give a sign of diabetes. A number of enzymes involved in glucose metabolism were developed to react with glucose and subsequently to indicate glucose content in blood sample. A wide variety of diabetes related enzymes from different sources can be located in Creative Enzymes. For instance, glucose-6-phosphate dehydrogenase deficiency was found to be a risk factor for diabetes. Intensive studies are being carried out to explain this association. Glucose oxidase and glucose dehydrogenase are mostly commonly used for clinical blood sugar test. Hexokinase catalyzes the phosphorylation of glucose to yield glucose 6-phosphate, which initiates the utilization of glucose. Other relevant enzyme products are also available in our catalog.



Diagnostic Enzymes for Liver Function Test



Liver Function Tests

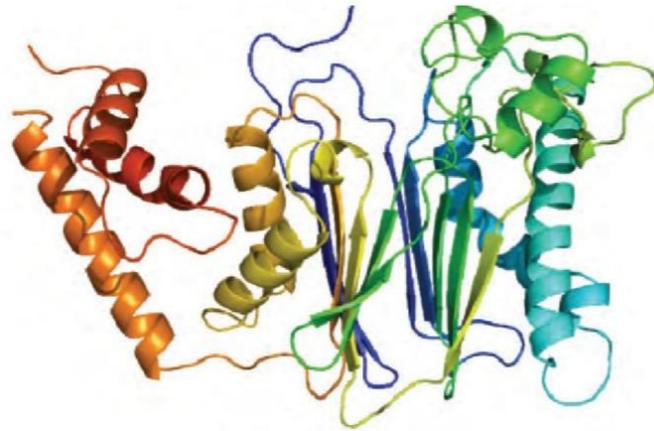
Liver function test is vital for early diagnosis of liver diseases and management of hepatic dysfunction patients. A number of enzymatic reactions were developed to detect the presence of unusual substances which are associated with different types of liver disorder or liver damage. Creative Enzymes has been supporting the clinical and research use of liver function evaluation with our diagnostic enzyme products.

To meet your specific requirements, we include diverse liver function related enzymes from distinct natural sources or from biochemical synthesis. We can provide you with malate dehydrogenase, D-lactate dehydrogenase, alcohol dehydrogenase, and alkaline phosphatase in natural form or recombinant form.

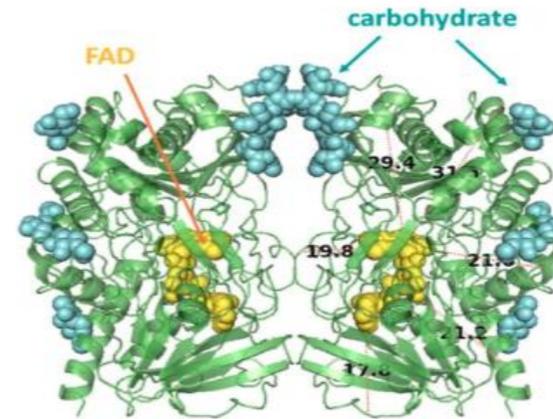


Diagnostic Enzymes for Clinical Diagnosis

There are mainly two aspects in diagnosing diseases with enzymes:



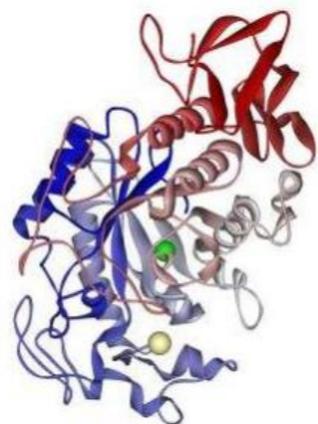
Abnormal changes in activity or location of particular enzymes and abnormal changes in status of certain substances.



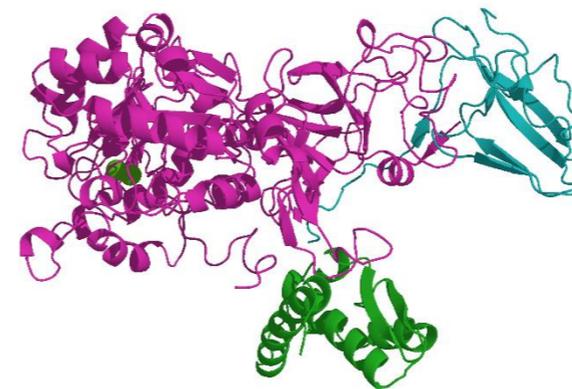
A number of disease markers are enzymes, which reveal the disease status with their corresponding altered pattern in serum or tissues.

Creative Enzymes offers stable supply of clinical diagnostic enzymes from natural source or recombinant system. Great services and sound products earned us a reputation as the leader among diagnostic enzymes manufacturers by clients around the world.

Diagnostic Enzymes for Kidney & Pancreas Function Diagnosis



Inflammation of kidney leads to increased level of amylase in blood, which can be determined by maltase and glucoamylase.



Urease is the key enzyme used to advise kidney failure by measuring urea content.

As the chemicals, enzymes, and other compounds which are secreted from kidney and pancreas typically remain stable in quality and quantity, unusual presence of particular entities or elevated level of certain enzymes in fluids is indicative of abnormal status of kidney or pancreas. **Creative Enzymes** has been serving kidney & pancreas function diagnostic enzymes for years in the global market.



Applications of Diagnostic Enzymes

01 Blood Lipids

03 Diabetes

05 POCT Bio-sensor

Liver Function **02**

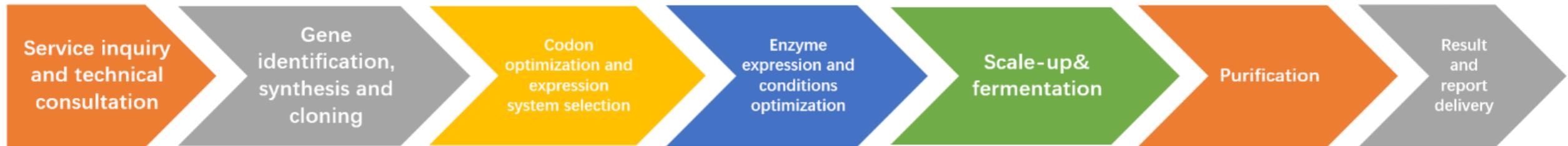
Clinical Diagnosis **04**

Kidney & Pancreas Function **06**



Our Services-Enzyme-Engineering-And-Modification

Creative Enzymes has decades of experiences in enzyme expression and purification. We provide a series of services including gene cloning, expression, and fermentation optimization and production of enzymes. The crude enzyme product is then purified properly to be stored or used with stable activities over time.



Creative Enzymes will best tailor these services based on customers' research needs. With extensive experiences in enzyme production, we are able to offer the best services.





Our Services-Enzyme Conjugation

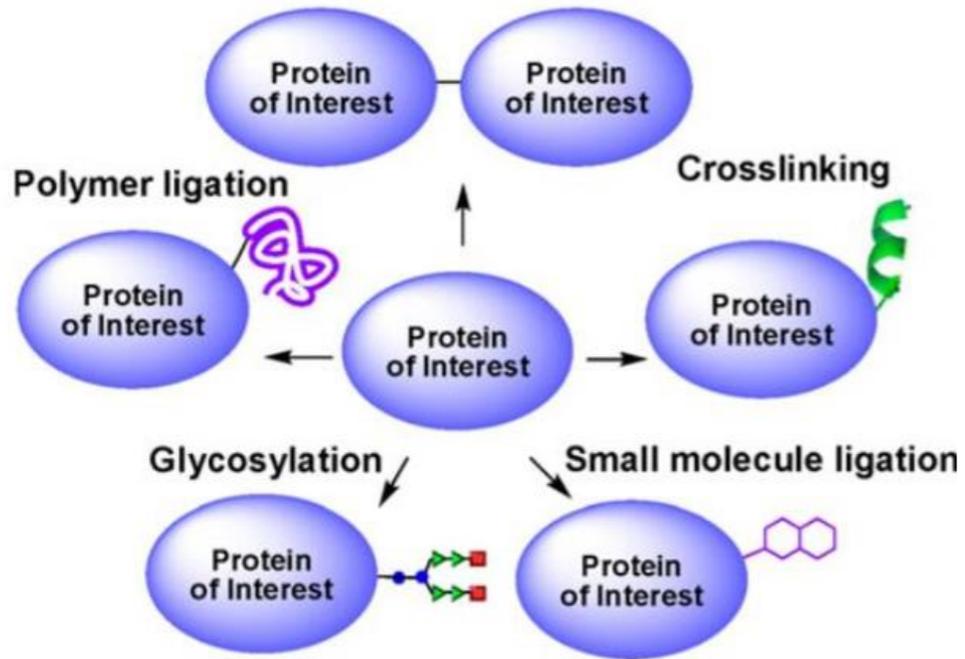


Figure 1. Protein conjugation with other molecules. (Chemical Reviews 2018)

Creative Enzymes's decades of experience on enzyme conjugation enables enzyme conjugates with various functional molecules, such as proteins/peptides, antibodies, polymers including polysaccharide, small molecules, and nucleic acids. With advanced technologies and instruments, we develop and prepare enzyme conjugates not only by innovative conjugation reactions, but also through improvement in protein expression, isolation and purification, and validation and characterization. We provide conjugation services for enzyme production based on customer requirements for various studies and applications, including immunosorbent assays (ELISAs), western blotting, immunostaining, and biosensors.

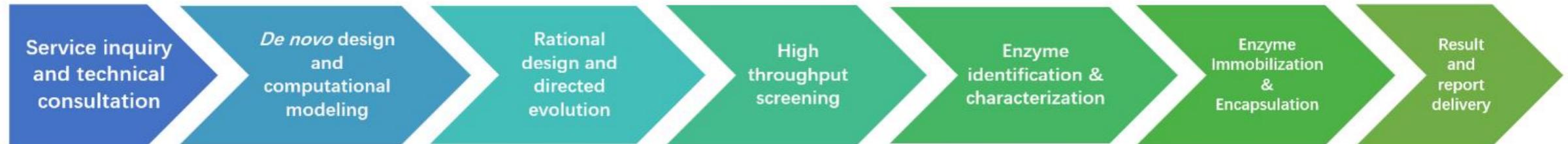




Our Services-Enzyme Expression and Purification

Creative Enzymes provides the enzyme engineering and modification service to help clients with the increasing needs in improving enzyme activity and properties and creating the perfect biocatalyst for a new reaction. **Creative Enzymes** is one of the few companies that provide solutions to such challenging tasks. After many years in serving companies and research institutes, we have demonstrated high reliability of our services.

Enzymes engineering and modification workflow



Engineered enzymes have already showed growing use in therapeutic and industrial products. **Creative Enzymes** is glad to help every customer in the search of improved and optimized enzymes. Our strong technical advantage is based on a large community of biochemical scientists, who bring the latest progresses in enzymology to serve your need. You will stay with the most recent enzyme engineering technics when you choose to partner with **Creative Enzymes**.

Contact Us

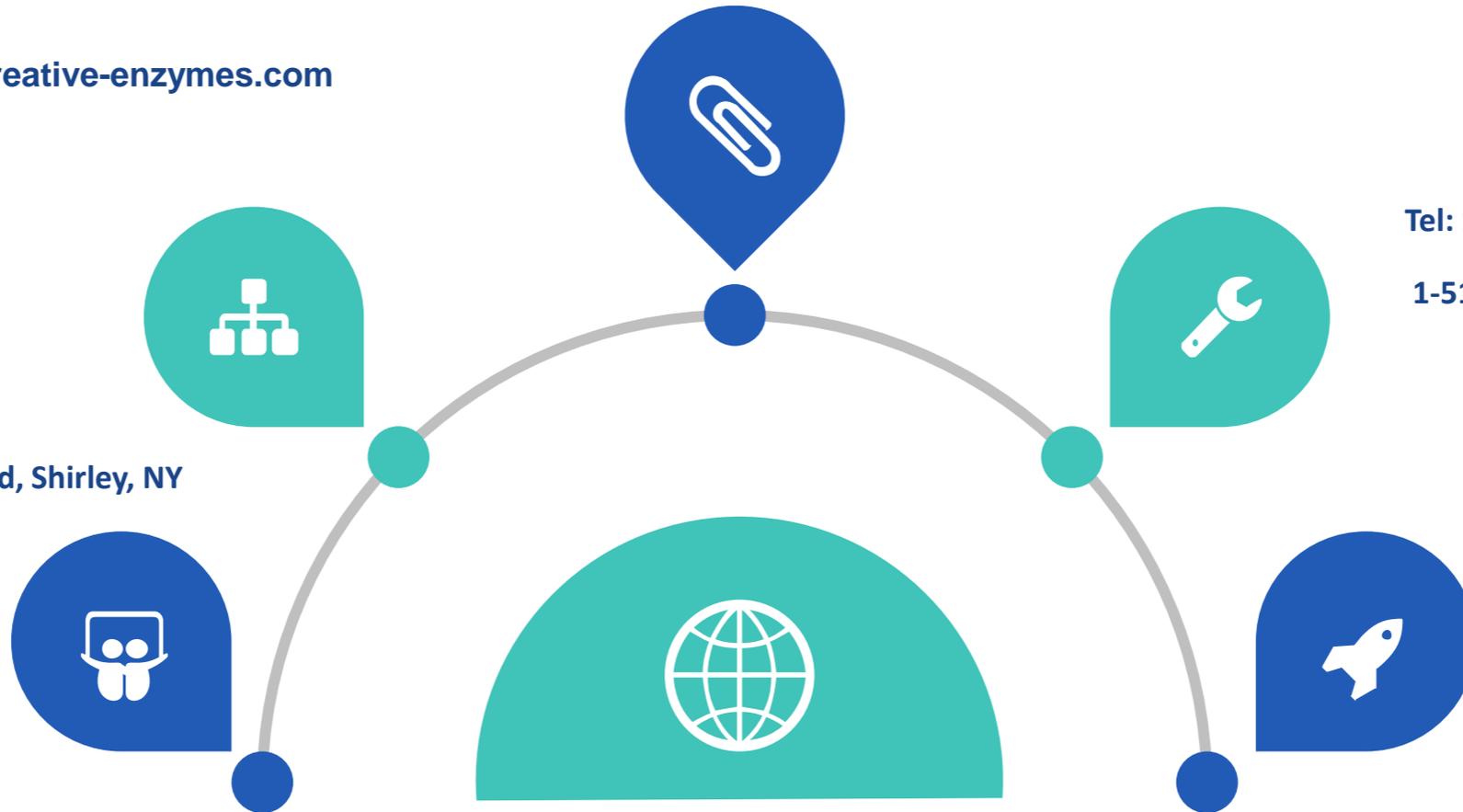
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A rack of ten test tubes, each containing a small amount of bright blue liquid, is the central focus of the image. The tubes are arranged in a white plastic rack. The background is a blurred laboratory setting with various glassware, including a large beaker on the right and a flask on the left. The overall color palette is dominated by light blues and whites, creating a clean, scientific atmosphere. The text 'THANK YOU' is overlaid in the lower center of the image.

**THANK
YOU**