



## **Certificate of Analysis**

**Product:** Acetylcholinesterase Assay Kit

**Catalog No.:** Z5030044

**Shipping Condition:** Room temperature

**Storage Condition:** Room temperature

**Shelf Life:** 6 months from the date of receipt under proper storage conditions

### **Description**

*ACETYLCHOLINESTERASE* (EC 3.1.1.7, AChE), also known as RBC cholinesterase, is found primarily in the blood and neural synapses. Low serum cholinesterase activity may relate to exposure to insecticides or to one of a number of variant genotypes. AChE catalyzes the hydrolysis of the neurotransmitter acetylcholine into choline and acetic acid, a reaction necessary to allow a cholinergic neuron to return to its resting state after activation. Cholinesterase levels of cells and plasma are used as a guide in establishing safety precautions relative to exposure and contact, as well as a guide in determining the need for workers to be removed from areas of contact with the organic phosphate insecticides.

Simple, direct and automation-ready procedures for measuring AChE activity are very desirable. Biochain's Acetylcholinesterase Assay is based on an improved Ellman method, in which thiocholine produced by the action of acetylcholinesterase forms a yellow color with 5,5'-dithiobis(2-nitrobenzoic acid). The intensity of the product color, measured at 412 nm, is proportionate to the enzyme activity in the sample.

### **Components**

1. One Kit
2. User Manual
3. Certificate of Analysis
4. MSDS



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### Components

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## **Certificate of Analysis**

**Product:** AF Cholesterol Assay Kit

**Catalog No.:** Z5030061

**Shipping Condition:** Dry ice

**Storage Condition:** Store reagents at -20°C.

**Shelf Life:** 6 months from the date of receipt under proper storage conditions

### **Description**

*CHOLESTEROL* is a sterol and lipid present in the cell membranes, and is transported in the bloodstream of all animals. It is used to form cell membranes and hormones, and plays important roles in cell signaling processes. Elevated levels (hypercholesterolemia) have been associated with cardiovascular diseases such as atherosclerosis; whereas, low levels (hypocholesterolemia) may be linked to depression, cancer and cerebral hemorrhage.

Simple, direct and automation-ready procedures for measuring cholesterol are very desirable. BioChain's Cholesterol Assay uses a single Working Reagent that combines cholesterol ester hydrolysis, oxidation and color reaction in one step. The color intensity of the reaction product at 570nm or fluorescence intensity at  $\lambda_{em}/\lambda_{ex} = 585/530\text{nm}$  is directly proportional to total cholesterol concentration in the sample.

### **Components**

1. One Kit
2. User Manual
3. Certificate of Analysis
4. MSDS



## Certificate of Analysis

**Product:** AF HDL and LDL/VLDL Assay Kit

**Catalog No.:** Z5030062

**Shipping Condition:** Dry ice

**Storage Condition:** Store PBS and Precipitation Reagent at room temperature and the rest reagents at -20°C.

**Shelf Life:** 6 months from the date of receipt under proper storage conditions

### Description

*CHOLESTEROL* concentrations in *High-Density Lipoprotein* (HDL) and *Low-Density* (LDL)/*Very-Low-Density* (VLDL) Lipoproteins are strong predictors for coronary heart disease. Functional HDL offers protection by removing cholesterol from cells and atheroma. Higher concentrations of LDL and lower concentrations of functional HDL are strongly associated with cardiovascular disease due to higher risk of atherosclerosis. The balances between high- and low-density lipoproteins are solely genetically determined, but can be changed by medications, food choices and other factors.

Simple, direct and automation-ready procedures for measuring HDL and LDL/VLDL concentrations are very desirable. BioChain's HDL and LDL/VLDL quantification kit is based on our improved PEG precipitation method in which HDL and LDL/VLDL are separated, and cholesterol concentrations are determined using a single Working Reagent that combines cholesterol ester hydrolysis, oxidation and color reaction in one step. The color intensity of the reaction product at 570nm or fluorescence intensity at  $\lambda_{em}/ex = 585/530nm$  is directly proportional to total cholesterol concentration in the sample.

### Components

1. One Kit
2. User Manual
3. Certificate of Analysis
4. MSDS



## DATA SHEET

**Product:  $\alpha$ -Glucosidase Assay Kit**

**Catalog No.: Z5030049**

**Shipping Condition: Room temperature**

**Storage Condition: -20°C**

**Shelf Life:** 6 months from the date of receipt under proper storage conditions

**Description**

$\alpha$ -*GLUCOSIDASE* hydrolyzes the terminal, non-reducing 1,4-linked  $\alpha$ -D-glucose residues with release of  $\alpha$ -D-glucose.  $\alpha$ -Glucosidase is needed by all animals to hydrolyze maltose to glucose for use as a food. Aberrant activities have been implicated in diseases such as diabetes and Pompe disease.

Simple, direct and automation-ready procedures for measuring  $\alpha$ -glucosidase activity are becoming popular in Research and Drug Discovery. Biochain's  $\alpha$ -Glucosidase Assay Kit is designed to measure  $\alpha$ -glucosidase activity directly in biological samples without pretreatment. The improved method utilizes *p*-nitrophenyl- $\alpha$ -D-glucopyranoside that is hydrolyzed specifically by  $\alpha$ -glucosidase into a yellow colored product (maximal absorbance at 405nm). The rate of the reaction is directly proportional to the enzyme activity.

**Components**

1. One Kit
2. User Manual
3. Certificate of Analysis
4. MSDS