



EZ-Cytox & EZ-LDH



EZ-Western Series & Protein Analysis



Assay Kit Series

Support Your Research!!!

# Assay Kit Series



ISO 9001:2015 GQ-242997  
ISO14001:2015 GE-241518  
ISO 45001:2018 GO-240735

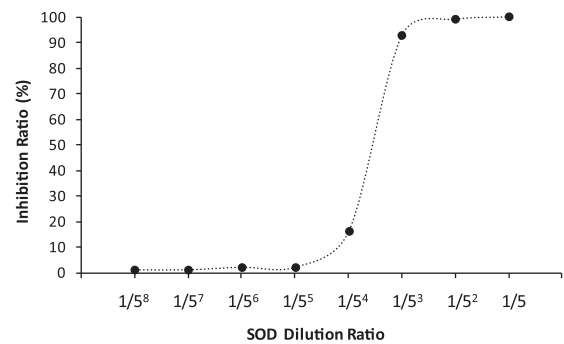
**Do**GENBio

# Oxidative Stress Assay Kit

- **Oxidative stress** arises when reactive oxygen species (ROS) are excessively produced during energy metabolism, leading to cellular and molecular damage. Chronic oxidative stress can result in DNA damage, a weakened immune system, accelerated aging, and a higher risk of diseases such as cancer.
- **The DoGENBio Oxidative Stress Assay Kits** provide a fast and accurate method for measuring oxidative markers in cells, tissues, and organs impacted by ROS. Designed for both research and clinical applications, our kits enable precise and efficient assessment of oxidative stress levels, making them valuable for disease research, aging studies, and immune health.

## 01 EZ-Superoxide Dismutase (SOD) Assay Kit (Colorimetric)

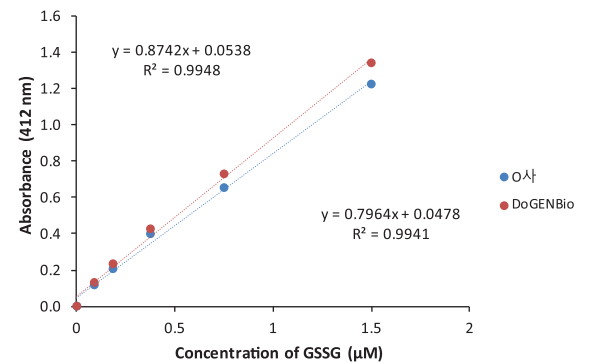
- Superoxide dismutase (SOD) is an enzyme that converts superoxide anions, byproducts of cellular metabolism, into hydrogen peroxide ( $H_2O_2$ ) and oxygen ( $O_2$ ), protecting cells from oxidative damage.
- The EZ-SOD Assay Kit provides a reliable assessment of SOD activity using the WST method for rapid and precise measurement with absorbance at 450 nm, even at low concentrations, for researchers and clinicians studying oxidative stress and cellular protection.



Product	Cat. No.	Volume
EZ-SOD Assay Kit	DG-SOD400	400 Assays

## 02 EZ-Glutathione (GSH/GSSG, Total) Assay Kit (Colorimetric)

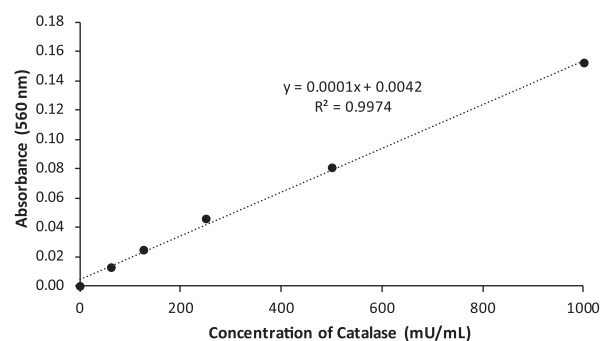
- Glutathione (GSH/GSSG) is a key thiol compound found in animal and plant tissues, as well as in bacteria and yeast, playing an essential role in cellular defense.
- The EZ-Glutathione Assay Kit provides accurate colorimetric measurement with absorbance at 412 nm, offering a reliable method for evaluating cellular oxidative balance and antioxidant defenses, making it an essential tool for various research applications.



Product	Cat. No.	Volume
EZ-Glutathione Assay Kit	DG-GLU200	200 Assays

## 03 EZ-Catalase Assay Kit (Colorimetric/Fluorometric)

- Catalase is a heme-containing redox protein present in all aerobic organisms, essential for breaking down hydrogen peroxide ( $H_2O_2$ ).
- The EZ-Catalase Assay Kit enables accurate quantification of catalase levels using Oxi-Probe and HRP, with measurements at 532 nm absorbance and 540/590 nm fluorescence, making it essential for researchers and clinicians studying oxidative stress.



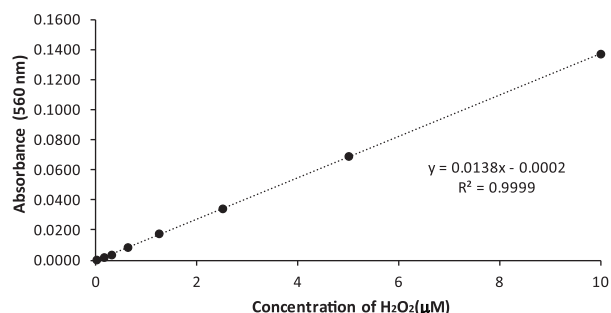
Product	Cat. No.	Volume
EZ-Catalase Assay Kit	DG-CAT400	400 Assays

## 04 EZ-Hydrogen Peroxide/Peroxidase Assay Kit (Colorimetric/Fluorometric)

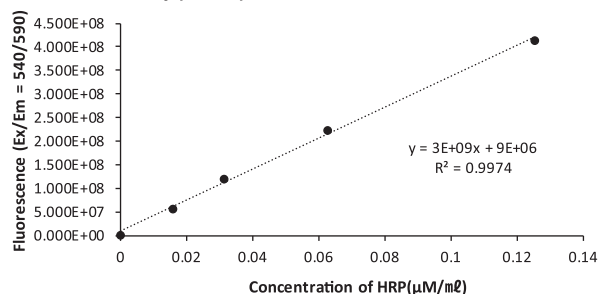
- Hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) and peroxidase are key compounds associated with oxidative stress and antioxidant responses within cells.
- The EZ-Hydrogen Peroxide/Peroxidase Assay Kit enables detection of H<sub>2</sub>O<sub>2</sub> in biological samples through dual-mode measurement using absorbance at 560 nm or fluorescence at Ex/Em = 540/590 nm, making it essential for oxidative stress research.

Product	Cat. No.	Volume
EZ-Hydrogen Peroxide/ Peroxidase Assay Kit	DG-PER500	500 Assays

H<sub>2</sub>O<sub>2</sub> Assay (Abs.)



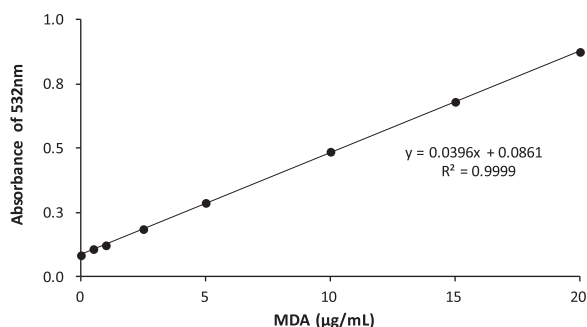
Peroxidase Assay (Fluor.)



## 05 EZ-Lipid Peroxidation (TBARS) Assay Kit (Colorimetric)

- TBARS are key indicators of lipid peroxidation in biological samples, and measuring the MDA-TBA adduct formed by the reaction of malondialdehyde (MDA) with thiobarbituric acid (TBA) effectively assesses lipid peroxidation levels.
- The EZ-Lipid Peroxidation (TBARS) Assay Kit provides rapid and precise assessment of lipid peroxidation through absorbance at 532 nm by measuring the MDA-TBA adduct, making it an essential tool for oxidative stress and lipid damage research.

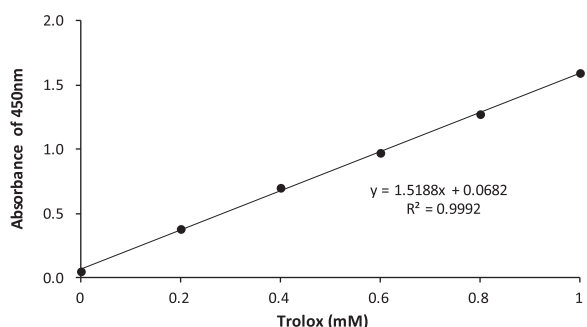
Product	Cat. No.	Volume
EZ-Lipid Peroxidation (TBARS) Assay Kit	DG-TBA200	200 Assays



## 06 EZ-Total Antioxidant Capacity (TAC) Assay Kit (Colorimetric)

- The TAC Assay, designed to measure the reduction of copper ions (Cu<sup>2+</sup> to Cu<sup>+</sup>), serves as a key indicator of a sample's ability to neutralize free radicals and defend against oxidative stress.
- The EZ-Total Antioxidant Capacity (TAC) Assay Kit enables rapid and precise assessment of antioxidant capacity through absorbance at 450 nm, making it an essential tool for research and diagnostic applications focused on antioxidant potential.

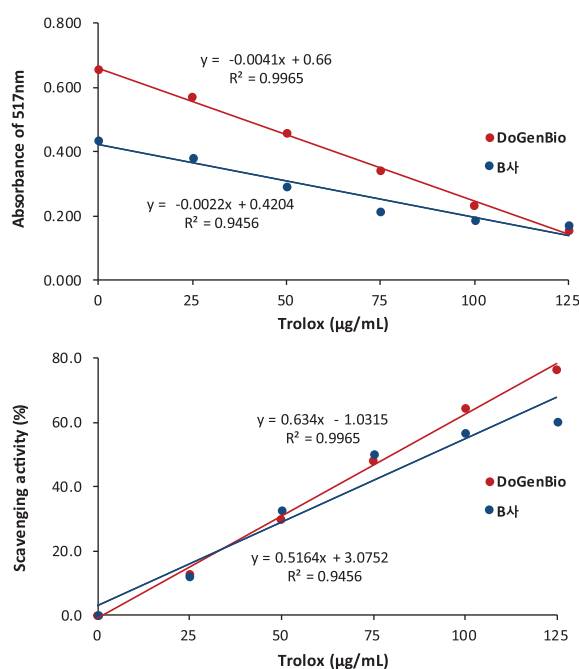
Product	Cat. No.	Volume
EZ-Total Antioxidant Capacity (TAC) Assay Kit	DG-TAC200	200 Assays



## 07 EZ- DPPH Antioxidant Assay Kit (Colorimetric)

- Antioxidants found in plants and animals play a vital role in mitigating the risk of diseases associated with oxidative stress.
- The EZ-DPPH Antioxidant Assay Kit provides a quick and reliable method for measuring antioxidant capacity using DPPH, with absorbance at 517 nm, making it essential for research on antioxidants and disease prevention.

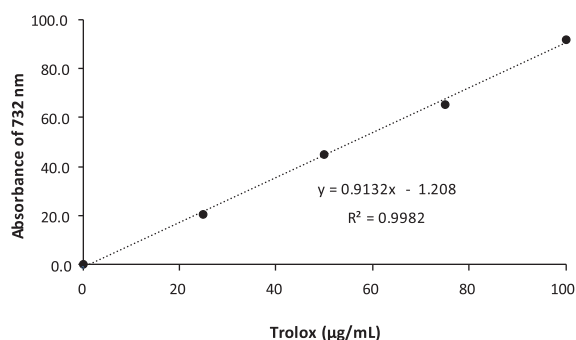
Product	Cat. No.	Volume
EZ-DPPH Antioxidant Assay Kit	DG-DPH400	400 Assays



## 08 EZ- ABTS Antioxidant Assay Kit (Colorimetric)

- The ABTS radical cation is a versatile antioxidant indicator with lower pH sensitivity than the DPPH method, enabling the measurement of both lipid-soluble and water-soluble antioxidant activities.
- The EZ-ABTS Antioxidant Assay Kit provides fast and precise measurement of antioxidant capacity through absorbance at 732 nm, making it an essential tool for comprehensive antioxidant analysis in research.
- Since the binding affinity of ABTS and DPPH radicals can vary depending on the type of antioxidant, using both methods is recommended for a more comprehensive assessment.

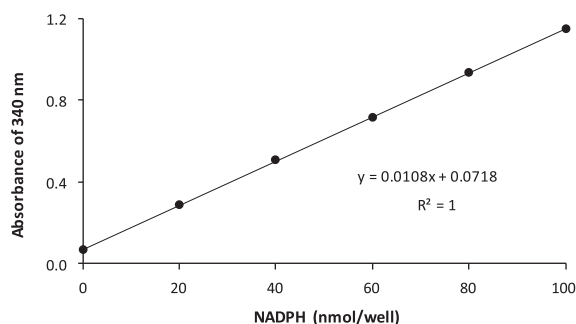
Product	Cat. No.	Volume
EZ-ABTS Antioxidant Assay Kit	DG-ABT400	400 Assays



## 09 EZ- Glutathione peroxidase Assay Kit (Colorimetric)

- Glutathione peroxidase (GPx) is a key antioxidant enzyme that protects cells from oxidative damage by reducing peroxides, essential for cellular health.
- The Glutathione Peroxidase (GPx) Assay Kit measures GPx activity accurately through absorbance at 340 nm, quantifying the decrease in NADPH levels consumed during the reduction process. This provides researchers with a reliable tool to evaluate antioxidant defense mechanisms.

Product	Cat. No.	Volume
EZ-Glutathione peroxidase (GPx) Assay Kit	DG-GPX100	100 Assays



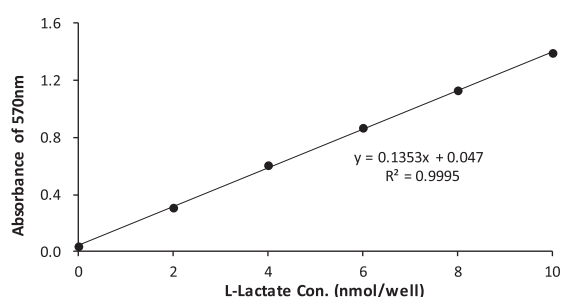
# Metabolism Assay Kit

- **Metabolism** involves processes through which living organisms absorb, synthesize, and break down substances to obtain energy. These processes include all the chemical reactions essential for sustaining life.
- **The DoGENBio Metabolism Assay Kits** offer a quick and convenient method for measuring metabolites produced during metabolic processes. Designed for research purposes, our kits facilitate efficient and precise assessment of metabolic activity, making them essential for biochemistry and physiology studies.

## 01 EZ-Lactate Assay Kit (L-) (Colorimetric)

- Lactate is an essential byproduct of metabolism that plays a key role in energy production and metabolic regulation and is closely linked to health conditions such as diabetes and lactic acidosis.
- The EZ-Lactate Assay Kit provides reliable lactate measurement through absorbance at 570 nm, enabling fast and precise quantification. It is an essential tool for metabolic and clinical research, serving as a key indicator of cellular metabolism in various studies.

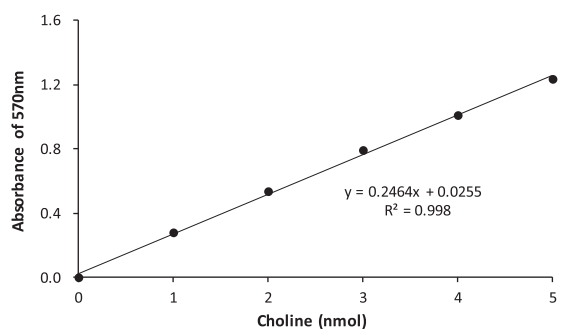
Product	Cat. No.	Volume
EZ-Lactate Assay Kit(L-)	DG-LAC100	100 Assays



## 02 EZ-Acetylcholinesterase Assay Kit (Colorimetric)

- Acetylcholinesterase (AChE) is an essential serine protease that breaks down the neurotransmitter acetylcholine and is vital for nervous system function.
- The EZ-Acetylcholinesterase Assay Kit provides a rapid and accurate method for measuring AChE activity through absorbance at 570 nm, making it an ideal tool for neurological and biochemical research.

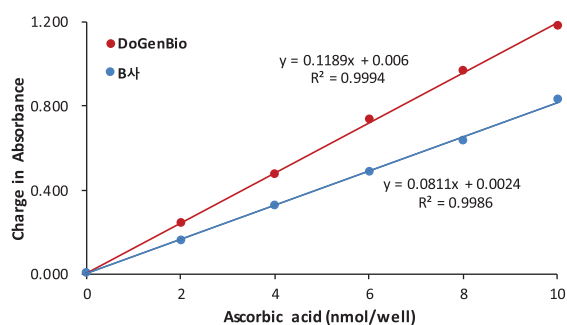
Product	Cat. No.	Volume
EZ-Acetylcholinesterase Assay Kit	DG-ACE100	100 Assays



## 03 EZ-Ascorbic Acid Assay Kit (Colorimetric)

- Ascorbic acid (vitamin C) is a powerful antioxidant found in various foods and biological samples, known for its role in reducing  $Fe^{3+}$  to  $Fe^{2+}$ .
- The EZ-Ascorbic Acid Assay Kit detects antioxidant activity through a color change when  $Fe^{2+}$  binds with a specific probe, enabling rapid and precise antioxidant assessment at 593 nm, making it ideal for food, health, and biochemical research.

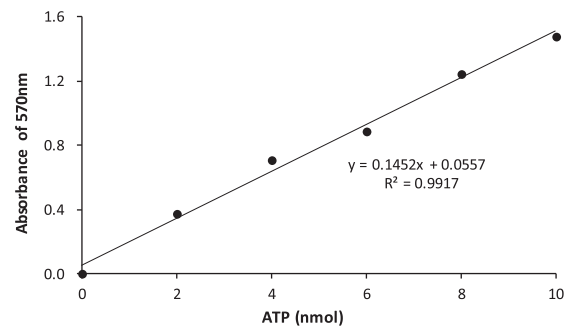
Product	Cat. No.	Volume
EZ-Ascorbic Acid Assay Kit	DG-ASC100	100 Assays



## 04 EZ-ATP Assay Kit (Colorimetric/Fluorometric)

- ATP is the primary energy source for all living organisms, playing a vital role in cellular metabolism.
- The EZ-ATP Assay Kit quantifies ATP levels by measuring the formation of glycerol-6-phosphate, providing a fast and accurate method through absorbance at 570 nm or fluorescence detection at Ex/Em = 535/595 nm. This makes it ideal for cellular and metabolic research applications.

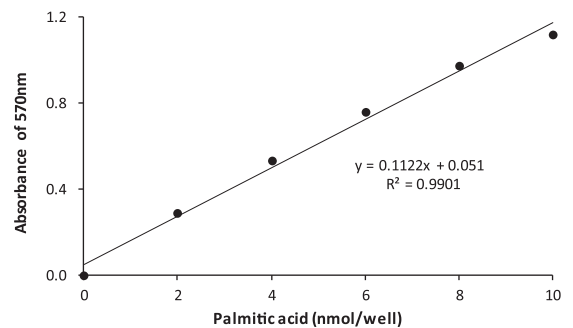
Product	Cat. No.	Volume
EZ-ATP Assay Kit	DG-ATP100	100 Assays



## 05 EZ-Free Fatty Acid Assay Kit (Colorimetric/Fluorometric)

- Free fatty acids (FFA) are essential fatty acids that serve as a key energy source within the body.
- The EZ-Free Fatty Acid Assay Kit allows rapid and precise measurement of FFA levels through absorbance at 570 nm and fluorescence detection at Ex/Em = 535/595 nm, making it ideal for energy metabolism and lipid biochemistry research.

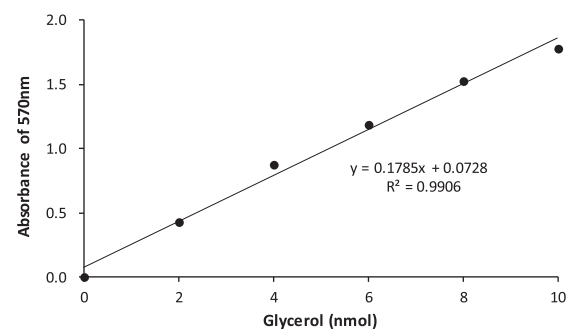
Product	Cat. No.	Volume
EZ-Free Fatty Acid Assay Kit	DG-FFA100	100 Assays



## 06 EZ-Free Glycerol Assay Kit (Colorimetric/Fluorometric)

- Glycerol is a primary component of triglycerides, which store fat and serve as an energy source in the liver and muscles.
- The EZ-Free Glycerol Assay Kit enables fast and accurate quantification of free glycerol levels using absorbance at 570 nm or fluorescence detection at Ex/Em = 535/590 nm, making it essential for research in lipid metabolism and energy storage.

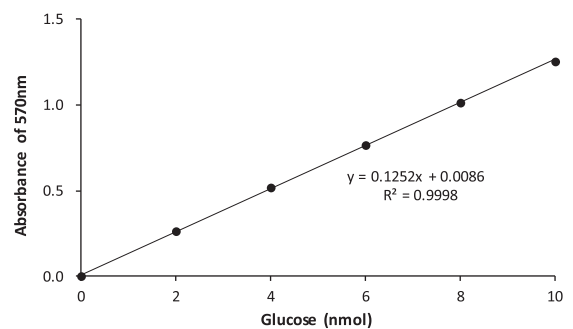
Product	Cat. No.	Volume
EZ-Free Glycerol Assay Kit	DG-FGC100	100 Assays



## 07 EZ-Glucose Assay Kit (Colorimetric/Fluorometric)

- Glucose is a vital biological fuel and the primary energy molecule for ATP production.
- The EZ-Glucose Assay Kit selectively measures glucose for rapid and efficient quantification, suitable for various metabolic research applications. This kit uses absorbance at 570 nm or fluorescence detection at Ex/Em = 535/595 nm, making it an invaluable tool for metabolic and biochemical research.

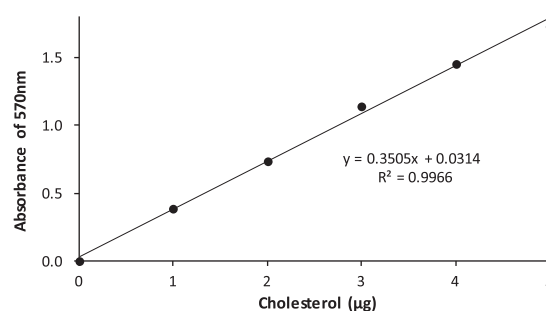
Product	Cat. No.	Volume
EZ-Glucose Assay Kit	DG-GCS100	100 Assays



## 08 EZ-HDL, LDL/VLDL Assay Kit (Colorimetric/Fluorometric)

- HDL (high-density lipoprotein) and LDL (low-density lipoprotein) are critical cholesterol indicators linked to cardiovascular health.
- The EZ-HDL, LDL/VLDL Assay Kit offers a simple and accurate method for measuring HDL and LDL/VLDL levels by isolating these lipoproteins from serum samples.
- This kit enables fast and precise quantification using absorbance at 570 nm or fluorescence detection at Ex/Em = 535/595 nm, making it an essential tool for lipid and cardiovascular research.

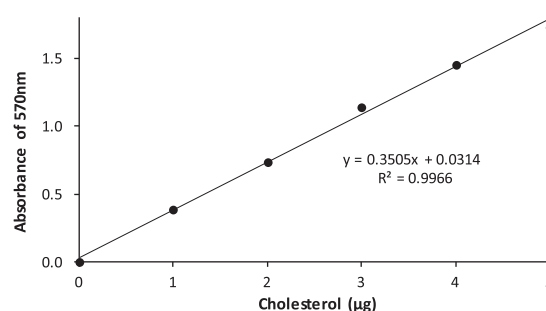
Product	Cat. No.	Volume
EZ-HDL, LDL/VLDL Assay Kit	DG-CHO100	100 Assays



## 09 EZ-Total Cholesterol Assay Kit (Colorimetric/Fluorometric)

- Total cholesterol in the blood is a key indicator of cardiovascular health.
- The EZ-Total Cholesterol Assay Kit provides a fast and accurate method for measuring total and free cholesterol using cholesterol esterase and absorbance at 570 nm or fluorescence at Ex/Em = 535/595 nm.
- Cholesteryl ester values can be determined by subtracting free cholesterol from total cholesterol, making this kit ideal for lipid profiling and cardiovascular research.

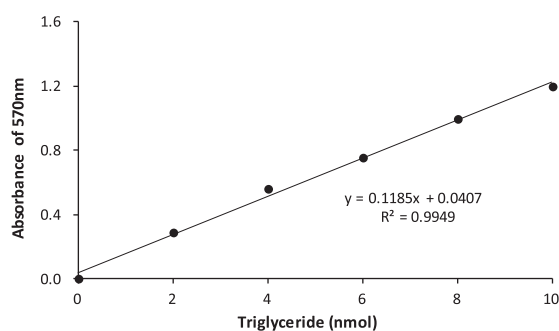
Product	Cat. No.	Volume
EZ-Total Cholesterol Assay Kit	DG-TSC100	100 Assays



## 10 EZ-Triglyceride Quantification Assay Kit (Colorimetric/Fluorometric)

- Triglycerides (TG) are essential components of plant and animal fats, LDL and VLDL, playing a vital role in energy storage and fatty acid transport.
- The EZ-Triglyceride Quantification Kit offers an accurate and convenient method for measuring triglycerides, monoglycerides and diglycerides in various samples.
- This kit enables fast and precise analysis using absorbance at 570 nm or fluorescence detection at Ex/Em = 535/595 nm, making it essential for lipid metabolism and nutritional research.

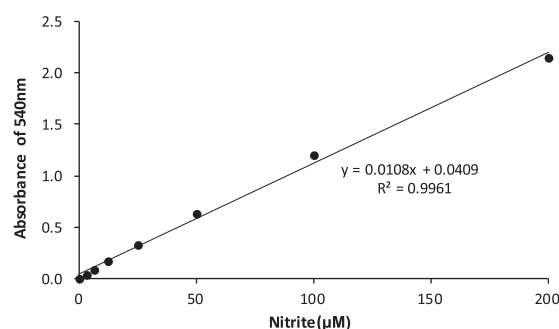
Product	Cat. No.	Volume
EZ-Triglyceride Quantification Assay Kit	DG-TGC100	100 Assays



## 11 EZ- Nitric Oxide Assay Kit (Colorimetric)

- Nitric oxide (NO) is a crucial signaling molecule involved in neurotransmission, vascular regulation, and immune response.
- The EZ-Nitric Oxide Assay Kit offers a reliable method for measuring nitrite (NO<sub>2</sub><sup>-</sup>), a stable end product of NO metabolism.
- This kit efficiently converts NO to nitrite, which reacts with Griess reagents to produce a red color measurable by absorbance at 540 nm, making it ideal for research in cellular signaling, vascular health, and immunology.

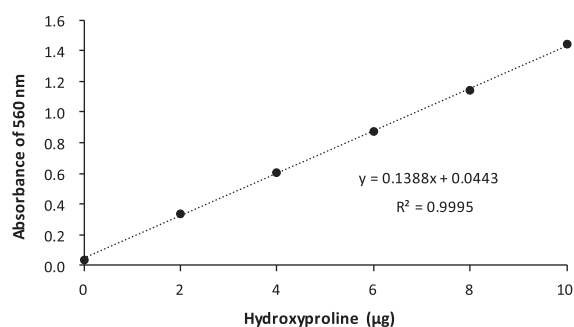
Product	Cat. No.	Volume
EZ-Nitric Oxide Assay Kit	DG-NO500	500 Assays



## 12 EZ- Total Collagen Assay Kit (Colorimetric)

- Collagen, a major component of the extracellular matrix and connective tissues, is a protein rich in hydroxyproline, allowing its content to be measured by quantifying hydroxyproline.
- The EZ-Total Collagen Assay Kit uses chloramine-T and Ehrlich's reagent to produce a color change measurable by absorbance at 560 nm, enabling precise and accurate collagen quantification for applications in tissue engineering and biomedical research.

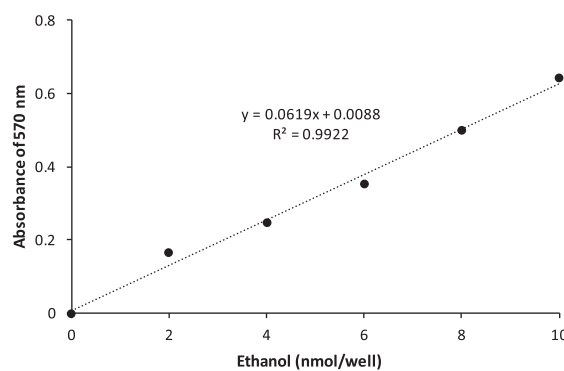
Product	Cat. No.	Volume
EZ-Total Collagen Assay Kit	DG-COL100	100 Assays



## 13 EZ-Ethanol Assay kit (Colorimetric)

- Ethanol, an important organic compound produced through fermentation, is widely used in beverages, fuels, and pharmaceuticals.
- The EZ-Ethanol Assay Kit measures absorbance at 570 nm to accurately determine alcohol concentration in samples, making it essential for evaluating fermentation efficiency, ensuring product quality, and optimizing biological research processes.

Product	Cat. No.	Volume
EZ-Ethanol Assay kit	DG-ETH100	100 Assays



## Oxidative Stress Assay Kit

No	Product	Cat. No.	Volume	Assay Method
1	EZ-Superoxide Dismutase(SOD) Assay Kit	DG-SOD400	400 Assays	Colorimetric
2	EZ-Glutathione(GSH/GSSG, Total) Assay Kit	DG-GLU200	200 Assays	Colorimetric
3	EZ-Catalase Assay Kit	DG-CAT400	400 Assays	Colorimetric/Fluorometric
4	EZ-Hydrogen Peroxide/Peroxidase Assay Kit	DG-PER500	500 Assays	Colorimetric/Fluorometric
5	EZ-Lipid Peroxidation(TBARS) Assay Kit	DG-TBA200	200 Assays	Colorimetric
6	EZ-Total Antioxidant Capacity (TAC) Assay Kit	DG-TAC200	200 Assays	Colorimetric
7	EZ-DPPH Antioxidant Assay Kit	DG-DPH400	400 Assays	Colorimetric
8	EZ-ABTS Antioxidant Assay Kit	DG-ABT400	400 Assays	Colorimetric
9	EZ-Glutathione peroxidase (GPx) Assay Kit	DG-GPX100	100 Assays	Colorimetric

## Metabolism Assay Kit

No	Product	Cat. No.	Volume	Assay Method
1	EZ-Lactate Assay Kit (L-)	DG-LAC100	100 Assays	Colorimetric
2	EZ-Acetylcholinesterase Assay Kit	DG-ACE100	100 Assays	Colorimetric
3	EZ-Ascorbic Acid Assay Kit	DG-ASC100	100 Assays	Colorimetric
4	EZ-ATP Assay Kit	DG-ATP100	100 Assays	Colorimetric/Fluorometric
5	EZ-Free Fatty Acid Assay Kit	DG-FFA100	100 Assays	Colorimetric/Fluorometric
6	EZ-Free Glycerol Assay Kit	DG-FGC100	100 Assays	Colorimetric/Fluorometric
7	EZ-Glucose Assay Kit	DG-GCS100	100 Assays	Colorimetric/Fluorometric
8	EZ-HDL, LDL/VLDL Assay Kit	DG-CHO100	100 Assays	Colorimetric/Fluorometric
9	EZ-Total Cholesterol Assay Kit	DG-TSC100	100 Assays	Colorimetric/Fluorometric
10	EZ-Triglyceride Quantification Assay Kit	DG-TGC100	100 Assays	Colorimetric/Fluorometric
11	EZ-Nitric Oxide Assay Kit	DG-NO500	500 Assays	Colorimetric
12	EZ-Total Collagen Assay Kit	DG-COL100	100 Assays	Colorimetric
13	EZ-Ethanol Assay Kit	DG-ETH100	100 Assays	Colorimetric