

# Human Oxidized High Density Lipoprotein (Human Ox-HDL)

## Product Information

Product Name	Cat#	Size
Human Oxidized High Density Lipoprotein (Human Ox-HDL)	20615ES10	10 mg

## Product Description

Lipoproteins mainly play a role in transporting lipids (such as cholesterol, lipids, and triglycerides) in the human body. According to the molecular weight, they are mainly divided into the following categories (from high to low): chyle (CM), very low density Lipoprotein (VLDL), Intermediate Density Lipoprotein (IDL), Low Density Lipoprotein (LDL), High Density Lipoprotein (HDL), etc. Among them, HDL is the lipoprotein with the highest density. Unlike other macromolecular lipoproteins, it mainly transports lipids to cells. HDL transports lipids out of cells. Therefore, high-density lipoproteins have the functions of removing excess blood lipids in blood vessels and removing blood scale, clean blood vessels, maintain the relative balance of cholesterol in cells, thereby limiting the occurrence and development of atherosclerosis and playing an anti-atherosclerotic effect.

There are many ways of oxidative modification of lipoprotein, the common ones are: 1) Cell-mediated oxidative modification, also known as biological oxidative modification. Such as endothelial cells, macrophages, monocytes have this function; 2) excessive metal ion-mediated oxidative modification, such as  $\text{Ca}^{2+}$ ,  $\text{Fe}^{2+}$ , etc.; there are other forms of oxidative modification, including physical methods such as ultraviolet light, or peroxidation catalyzed by enzymes.

Human Oxidized High Density Lipoprotein (Human Ox-HDL) provided by YEASEN is the oxidative modification of human plasma-derived HDL mediated by excessive copper ions. Fresh plasma was tested negative for HCV, HBsAg and HIV. This product is sterile packaged and can be directly diluted for use. The high oxidation level of this High Ox-HDL makes it produce obvious oxidative stress, which can be used to induce cell apoptosis and establish cell damage model.

## Product Properties

<b>Purity by Agarose Gel</b>	>98%
<b>Concentration</b>	1.0-2.0 mg/mL
<b>Appearance</b>	milky liquid
<b>Buffer</b>	0.01 $\mu\text{M}$ EDTA in PBS, pH 7.4
<b>Oxidized Level</b>	TBARS detection (reflects the degree of oxidation of HDL according to the content of MDA) Starting HDL: 0.1~0.5 nmol MDA/mg protein High Ox-HDL: 90~100 nmol MDA/mg protein
<b>Dilution method</b>	It can be diluted with PBS phosphate buffered saline or cell culture medium according to the experimental needs.

## Shipping and Storage

The product is shipped with ice pack and can be stored at 4°C, protected from light for 8 weeks upon receipt.

Do not freeze!

## Cautions

- 1.The diluted product is extremely unstable; it is recommended to use it immediately.
- 2.Precipitation may occur in long-term storage, which is a normal phenomenon. Centrifuge at low speed for 2 mins to remove the precipitate and use it.
- 3.For your safety and health, please wear lab coats and disposable gloves for operation.
- 4.For research use only!