HB220419

Human DiI-High Density Lipoprotein (Human DiI-HDL)

Product Information

Product Name	Cat#	Size
Human DiI-High Density Lipoprotein (Human DiI-HDL)	20611ES76	500 μg

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.

This Human DiI-High Density Lipoprotein is a high density lipoprotein labeled with fluorescent probe DiI (1,1'-dioctadecyl-3,3,3',3'-tetramethyl-indocarbocyanine perchlorate), which can be used to observe the HDL of cultured cells Binding sites, or screen mutants of cells deficient in HDL receptor expression. Cellular receptor levels can also be assessed by flow cytometry, or to detect receptor levels in tissue.

The Human DiI-HDL provided by YEASEN is sterile packaged and can be directly diluted for use. In addition to providing DiI-HDL, we also provide unlabeled HDL, I^{125} labeled HDL.

Product Properties

Concentration	0.8-3.0 mg/ml
Appearance	milky liquid
Absorbance Ratio	DiI/Protein=555nm/275nm=1.4
Buffer Components	0.02 mM EDTA in PBS, pH 7.4
Preparation	The purified HDL derived from human healthy plasma was directly labeled with DiI fluorescent probe, and then the labeled product was purified and recovered by ultracentrifugation and dialysis, and the filter was sterilized by filtration. Purified DiI-HDL was dissolved in PBS containing 0.02 mM EDTA, pH 7.4.

Shipping and Storage

The product is shipped with ice pack and can be stored at 4°C, protected from light, stable for 6 weeks upon receipt.

Do not freeze! Be sure to use it aseptically!

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 minutes 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!

Instructions

1.Under sterile conditions, dilute DiI-HDL with cell culture medium to 10-30 μg/mL.

2.Add to live cells and incubate at 37℃ for 4-5 hours.

3.At the end of incubation, the medium containing Human DiI-HDL was aspirated and washed several times with probe-free medium.

4.Detect by fluorescence microscope or flow cytometer according to experimental requirements.

a) Fluorescence microscope observation

Use standard rhodamine excitation: emission filter (or recommended wavelength: Ex/Em=549nm/565nm); if necessary, please use PBS containing 3% formaldehyde for fixation, do not use methanol or acetone for fixation, because DiI Soluble in organic solvents. [Note]:Positive cells need to be set as a control.

b) Cell sorting (flow cytometry)

Cells were trypsinized or single-cell suspension was made by adding EDTA, and appropriate labeled purified cells were used as negative and positive controls for flow sorting gates. (The recommended wavelengths are Ex: 514/549nm; Em: 565nm).