High-density Lipoprotein Microplate Assay Kit

Catalog # AS0114

Detection and Quantification of High-density Lipoprotein Content in Serum, Plasma and other biological samples Samples.

This instruction must be read in its entirety before using this product.

For research use only, Not for use in diagnostic procedures.

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I. INTRODUCTION

Lipoproteins transport the majority of plasma lipids including cholesterol and triglycerides. High-density lipoprotein (HDL), low-density lipoprotein (LDL), and very-low-density lipoprotein (VLDL) are the lipoproteins responsible for the vast majority of cholesterol transport in the blood. High LDL levels and low HDL levels are strongly associated with increased risk of adverse cardiovascular events.

In this kit, serum HDL and LDL/VLDL are first separated and then the cholesterol concentration of each is determined by a coupled enzyme assay.The productscan be measured at a colorimetric readout at 550 nm.

II.KIT COMPONENTS

Component	Volume	Storage
96-Well Microplate	1 plate	
Assay Buffer	30 mlx 4	4 °C
Precipitation Buffer	10 mlx 1	4 °C
Diluent	20 mlx 1	4 °C
Enzyme	Powderx 1	-20 °C, keep in dark
Dye Reagent	Powderx 1	4 °C, keep in dark
Standard(10 mmol/L)	1 ml x 1	4 °C
Technical Manual	1 Manual	

Note:

Enzyme: add 10 ml Diluent to dissolve before use.

Dye Reagent: add 10 ml Diluent to dissolve before use.

III. MATERIALS REQUIRED BUT NOT PROVIDED

1. Microplate reader to read absorbance at 550 nm
2. Distilled water
3. Pipettor
4. Pipette tips
5. Centrifuge
6. Timer

IV. SAMPLE PREPARATION

1.For serum, plasma and other biological samples

Add 100 µlserum and100 µlPrecipitation Bufferinto the microcentrifuge tube, mix, centrifuged at 3,000g 25 °C for 5 minutes.Take the supernatant into a new centrifuge tube for detection.

V. ASSAY PROCEDURE

Add following reagents intothe microplate:

Reagent	Sample	Standard	Blank
Sample	10 µl	--	--
Standard	--	10 µl	--
Assay Buffer	--	--	10 µl
Enzyme	100 µl	--	--
Diluent	--	100 µl	100 µl
Dye Reagent	100 µl	100 µl	100 µl
Mix, 37 °C wait for 10 minutes, measured at 550 nm and recordthe absorbance.			

Note: The concentrations can vary over a wide range depending on the sample. For unknown samples, we recommend doing a pilotexperiment & testing several doses to ensure the readings are within the Standard Curve range.

VI. CALCULATION

1. According to the serum sample

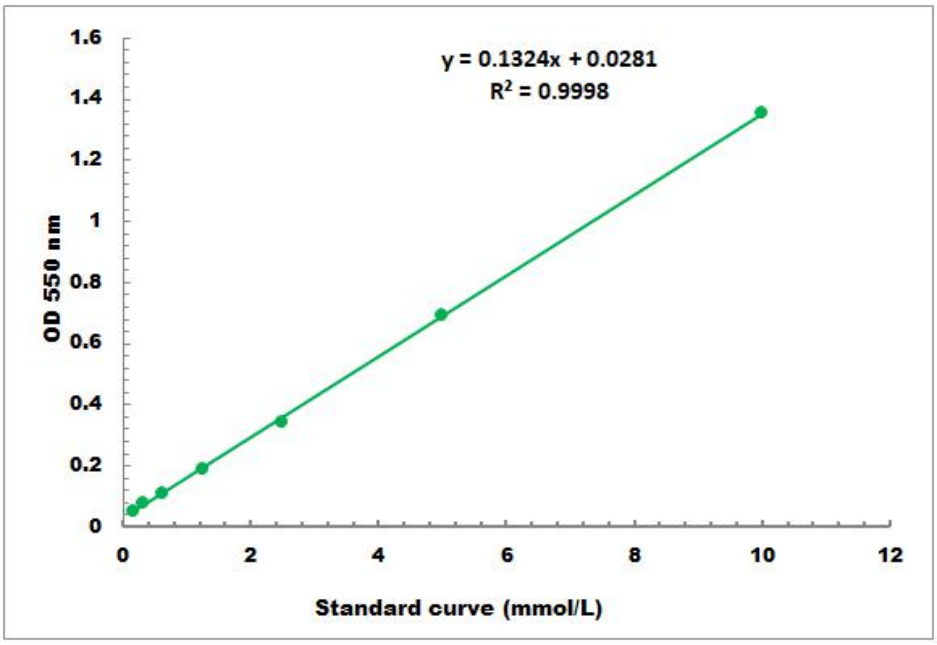
$HDL(mmol/L) = C_{Standard} \times (OD_{Sample} - OD_{Blank}) / (OD_{Standard} - OD_{Blank}) \times 2$

$= 20 \times (OD_{Sample} - OD_{Blank}) / (OD_{Standard} - OD_{Blank})$

$C_{Standard}$: the concentration of Standard, 10 mmol/L.

VII. TYPICAL DATA

The standard curve is for demonstration only. A standard curve must be run with each assay.



Detection Range: 0.1 mmol/L - 10 mmol/L

VIII. TECHNICAL SUPPORT

For troubleshooting, information or assistance, please go online to www.sabbiotech.cn or contact us at techcn@signalwayantibody.com

IX. NOTES