

PLTP Activity Fluorometric Assay Kit II

Product Information

Cat.No.

Kit-0709

Product Overview

PLTP Activity Assay Kit II (Fluorometric) uses a donor molecule containing a fluorescent self-quenched phospholipid that is transferred to an acceptor molecule in the presence of Phospholipid Transfer Protein (PLTP). PLTP-mediated transfer of the fluorescent phospholipid to the acceptor molecule results in an increase in fluorescence (Ex/Em = 465/535 nm). The fluorometric intensity is directly proportional to the amount of phospholipid transferred. The kit contains rabbit serum as positive control for assay validation. This assay can measure PLTP activity in serum but can also be used for testing activity of recombinant PLTP protein.

Description

Phospholipid Transfer Protein (PLTP) is a protein found in mammalian plasma that plays an important role in transferring phospholipids between high-density lipoprotein (HDL) molecules and in the modulation of HDL size and composition, as well as in controlling plasma HDL levels. PLTP also plays a key role in the uptake of cholesterol from peripheral cells and tissues that is subsequently transported to the liver for degradation and excretion. Two distinct forms of PLTP exist in plasma: an active form that can transfer PC from phospholipid vesicles to high-density lipoproteins (HDL), and an inactive form that lacks this capability. Due to its role in cholesterol transport, PLTP may promote atherosclerosis and is, therefore, considered a promising target for pharmacological intervention.

Applications

Functional Studies

Target Species

Reacts with: Rabbit, Human Predicted to work with: all Mammals

Storage

Store kit at 4°C in the dark immediately upon receipt, except for the PLTP positive control which



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should be stored at -20°C. Kit has a storage time of 1 year from receipt, providing components have not been reconstituted. Refer to list of materials supplied for storage conditions of individual components. Observe the storage conditions for individual prepared components in section 5. Aliquot components in working volumes before storing at the recommended temperature. Reconstituted components are Stable for 2 months.

Kit Components

Components 100 tests Donor Molecule 1 x 0.2ml PLTP Acceptor Molecule 1 x 0.5ml PLTP Assay Buffer 1 x 20ml Positive Control 1 x 0.1ml

Detection method Fluorescent

Compatible Sample Types

Serum, Plasma, Purified protein
