Human Platelet-Derived Growth Factor AA (PDGF-AA) ELISA Kit

Catalog No: #EK8619

Package Size: #EK8619-1 48T #EK8619-2 96T

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Description

Product Name	Human Platelet-Derived Growth Factor AA (PDGF-AA) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).

Application Details

Detect Range:1.56-100 ng/mL

Sensitivity:0.78 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

Product Description

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate PDGF-AA in samples. An antibody specific for PDGF-AA has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPDGF-AA present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PDGF-AA is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of PDGF-AA bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:The receptor for PDGF, PDGFR is classified as a receptor tyrosine kinase (RTK), a type of cell surface receptor. Two types of PDGFRs have been identified: alpha type and beta type PDGFRs. The alpha type binds to PDGF-AA, PDGF-BB and PDGF-AB while the beta type PDGFR binds with high affinity to PDGF-BB and PDGF-AB. PDGF binds to PDGFRs ligand binding pocket located within the second and third immunoglobulin domains. Upon activation by PDGF, these receptors dimerise, and are "switched on" by auto-phosphorylation of several sites on their cytosolic domains, which serve to mediate binding of cofactors and subsequently activate signal transduction, for example, through the PI3K pathway. The role of PI3K has been investigated by several laboratories. Accumulating data suggests that while this molecule is generally part of growth signaling complex, it plays a more profound role in controlling cell migration.

Note: This product is for in vitro research use only