

APC919Hu01 100µg
Active Platelet Derived Growth Factor D (PDGFD)
Organism Species: *Homo sapiens (Human)*
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Arg19~Arg370

Tags: N-terminal His-tag

Purity: >95%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 5% trehalose.

Applications: Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 8.4

Predicted Molecular Mass: 44.4kDa

Accurate Molecular Mass: 44kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

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RD TSATPQSASI KALRNANLRR DESNHLTDLY
RRDETIQVKG NGYVQSPRFP NSYPRNLLLT WRLHSQENTR IQLVFDNQFG
LEEAEENDICR YDFVEVEDIS ETSTIIRGRW CGHKEVPPRI KSRTNQIKIT
FKSDDYFVAK PGFKIYYSLL EDFQAAASE TNWESVTSSI SGVSYNSPSV
TDPTLIADAL DKKIAEFDTV EDLLKYFNPE SWQEDLENMY LDTPRYRGRS
YHDRKSKVDL DRLNDDAKRY SCTPRNYSVN IREELKLANV VFFPRCLLVQ
RCGGNCGCGT VNWRSCCTNS GKTVKKYHEV LQFEPGHIKR RGRAKTMALV
DIQLDHERC DCICSSRPPR
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[ACTIVITY]

Platelet-derived growth factor D (PDGFD) is a protein that in humans is encoded by the PDGFD gene. The protein encoded by this gene is a member of the platelet-derived growth factor family. PDGF plays a significant role in blood vessel formation, the growth of blood vessels from already-existing blood vessel tissue, mitogenesis. PDGF also plays a role in embryonic development, cell proliferation, cell migration, and angiogenesis. Besides, Macrophage Erythroblast Attacher (MAEA) has been identified as an interactor of PDGFD, thus a binding ELISA assay was conducted to detect the interaction of recombinant human PDGFD and recombinant human MAEA. Briefly, PDGFD were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100µL were then transferred to MAEA-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-PDGFD pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were

incubated 15-25 minutes at 37°C. Finally, add 50µL stop solution to the wells and read at 450nm immediately. The binding activity of PDGFD and MAEA was shown in Figure 1, and this effect was in a dose dependent manner.

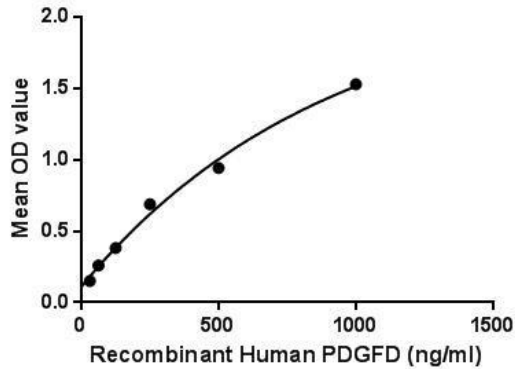


Figure 1. The binding activity of PDGFD with MAEA.

[IDENTIFICATION]

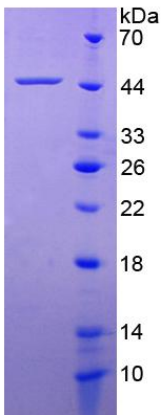


Figure 2. SDS-PAGE

Sample: Active recombinant PDGFD, Human

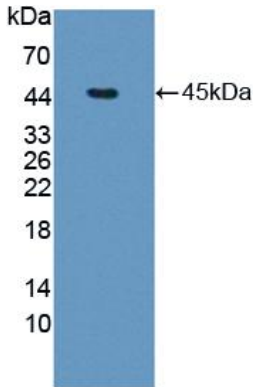


Figure 3. Western Blot

Sample: Recombinant PDGFD, Human;

Antibody: Rabbit Anti-Human PDGFD Ab (PAC919Hu01)

[IMPORTANT NOTE]

The kit is designed for in vitro and research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.