

APA528Hu01 100µg

Active Platelet Derived Growth Factor Subunit A (PDGFA)

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: Ser87~Thr211

Tags: N-terminal His-tag

Purity: >92%

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: 9.6

Predicted Molecular Mass: 17.4kDa

Accurate Molecular Mass: 17kDa 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]

SIEE AVPAVCKTRT
VIYEIPRSQV DPTSANFLIW PPCVEVKRCT GCCNTSSVKC QPSRVHHRSV
KVAKVEYVRK KPKLKEVQVR LEEHLEACA TTSLNPDYRE EDTGRPRESG
KKRKRRLKP T

[ACTIVITY]

Platelet Derived Growth Factor Subunit A (PDGFA) is a member of Platelet-derived growth factor (PDGF) family which plays a significant role in blood vessel formation, the growth of blood vessels from already-existing blood vessel tissue, mitogenesis, i.e. proliferation, of mesenchymal cells such as fibroblasts, osteoblasts, tenocytes, vascular smooth muscle cells and mesenchymal stem cells as well as chemotaxis, the directed migration, of mesenchymal cells. Besides, Platelet Derived Growth Factor Receptor Alpha (PDGFRa) has been identified as an interactor of PDGFA, thus a binding ELISA assay was conducted to detect the interaction of recombinant human PDGFA and recombinant human PDGFRa. Briefly, PDGFA were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100µl were then transferred to PDGFRa-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-PDGFA 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 PDGFA and PDGFRa was shown in Figure 1, and this effect was in a dose dependent manner.

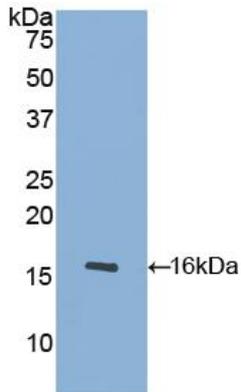


Figure 4. Western Blot

Sample: Recombinant PDGFA, Human;

Antibody: Rabbit Anti-Human PDGFA Ab (PAA528Hu01)

[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.