

Platelet Derived Growth Factor Subunit A (PDGFA) Active Protein | PDGFA active protein

Active Platelet Derived Growth Factor Subunit A (PDGFA)

CATALOG # AAA148131	REACTIVITY Mouse	APPLICATIONS Activity Assay, Cell Culture
-------------------------------	----------------------------	---

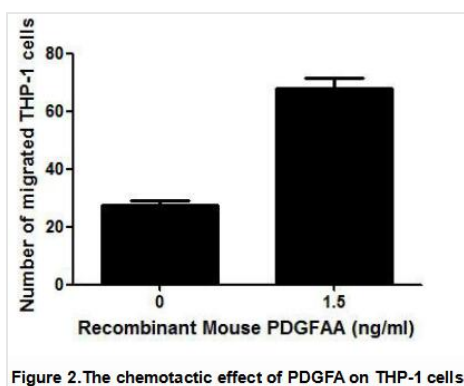
PRODUCT SYNONYMS

Platelet Derived Growth Factor Subunit A (PDGFA); Active Platelet Derived Growth Factor Subunit A (PDGFA); PDGF-A; PDGF1; Platelet Derived Growth Factor Alpha Polypeptide; PDGFA active protein

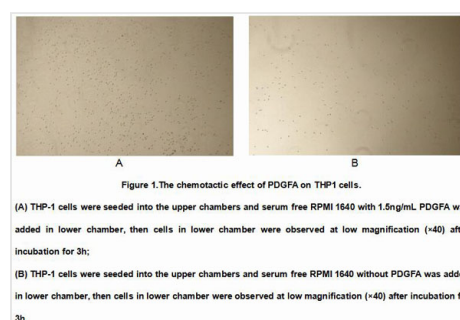
PRODUCT SPECIFICATIONS

Reactivity	Mouse
Purity/Purification	> 95%
Form/Format	Freeze-dried powder
Sequence Length	196
Applicable Applications for PDGFA active protein	Activity Assay, Cell Culture
Tag	N-terminal His Tag
Buffer Formulation	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Fragment	Ala94~Asp194
Isoelectric Point	8.9

IMAGES

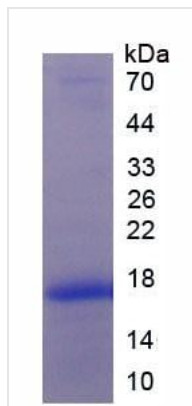


Application Data

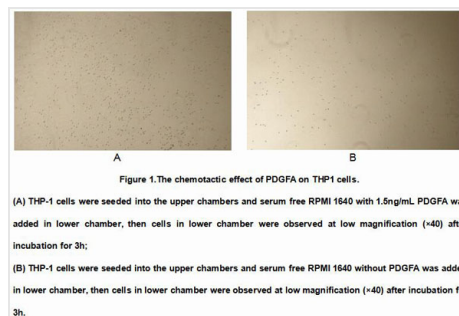


Application Data

Application Data



SDS-PAGE



Activity

PDGFA (Platelet-derived growth factor subunit A) is a Growth factor that plays an essential role in the regulation of embryonic development, cell proliferation, cell migration, survival and chemotaxis. PDGFA has been described as a chemoattractant for monocytes and proven to be able to induce chemotactic migration of THP-1 cells. Therefore, chemotaxis assay used 24-well microchemotaxis system was undertaken to detect the chemotactic effect of PDGFA on the human monocytic cell line THP-1. Briefly, THP-1 cells were seeded into the upper chambers (100uL cell suspension, 106cells/mL in RPMI 1640 with 0.5% FBS) and PDGFA (1.5ng/mL, 7.5ng/mL and 15ng/mL diluted separately in serum free RPMI 1640) was added in lower chamber with a polycarbonate filter (8um pore size) used to separate the two compartments. After incubation at 37oC with 5%CO₂ for 3h, the filter was removed, then cells in low chamber were observed by inverted microscope at low magnification ($\times 40$) and the number of migrated cells were counted at high magnification ($\times 400$) randomly (five fields for each filter). Result shows PDGFA is able to induce migration of THP-1 cells. The migrated THP-1 cells in low chamber at low magnification ($\times 40$) were shown in Figure 1. Five fields of each chamber were randomly chosen, and the migrated cells were counted at high magnification ($\times 400$). Statistical results were shown in Figure 2. The optimum chemotaxis of PDGFA occurs at 1.5ng/mL.

ADDITIONAL INFORMATION

Product Categories/Family for PDGFA active protein

Cytokine; Tumor immunity; Infection immunity; Bone metabolism

NCBI AND UNIPROT INFORMATION

NCBI GI #	6715566
NCBI GeneID	18590
NCBI Accession #	NP_032834.1
NCBI GenBank Nucleotide #	NM_008808.3
UniProt Accession #	P20033
Molecular Weight	Predicted Molecular Weight: 15.2kDa Accurate Molecular Weight: 17kDa
NCBI Official Full Name	platelet-derived growth factor subunit A
NCBI Official Synonym Full Names	platelet derived growth factor, alpha
NCBI Official Symbol	Pdgfa
NCBI Protein Information	platelet-derived growth factor subunit A
UniProt Protein Name	Platelet-derived growth factor subunit A
UniProt Gene Name	Pdgfa
UniProt Synonym Gene Names	PDGF subunit A

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

