

Mouse PDGFA protein, His tag (active)

Cat. No. GTX00292-pro

Applications Functional Assay

Species Mouse

Package

10 µg

Applications

Application Note

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 (100 µl cell suspension, 1x10⁶cells/ml in RPMI-1640 with 0.5% FBS) and PDGFA (1.5 ng/ml, 7.5 ng/ml and 15 ng/ml diluted separately in serum free RPMI-1640) was added in lower chamber with a polycarbonate filter (8µm pore size) used to separate the two compartments. After incubation at 37°C with 5% CO₂ for 3h, the filter was removed, then cells in low chamber were observed by inverted microscope at low magnification (×40) and the number of migrated cells were counted at high magnification (×400) randomly. PDGFA is able to induce migration of THP-1 cells, and the optimum chemotaxis of PDGFA occurs at 1.5 ng/ml.

Observed MW (kDa) 17 kDa.

Properties

Form Lyophilized powder

Buffer Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.

Preservative ProClin 300

Storage For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.

Region/Sequence N-terminal His-Tag; Ala94~Asp194 (NP_032834.1)

Expression System E. coli

Purity > 95%

Endotoxin < 1 EU/µg

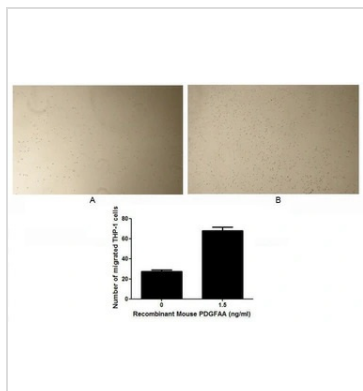
Conjugation Unconjugated

Note For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.



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DATA IMAGES



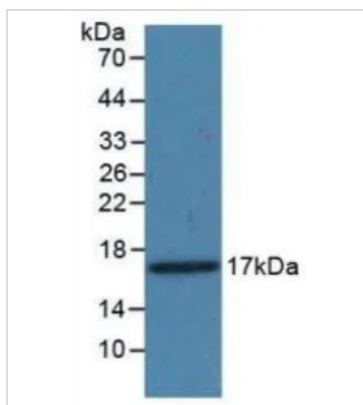
GTX00292-pro Functional Assay Image

The chemotactic effect of GTX00292-pro Mouse PDGFA protein (active).

Upper: (A) THP-1 cells were seeded into the upper chambers and serum free RPMI-1640 without PDGFA was added in lower chamber, then cells in lower chamber were observed at low magnification (×40) after incubation for 3hrs.

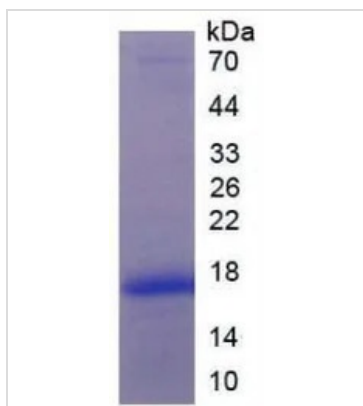
(B) THP-1 cells were seeded into the upper chambers and serum free RPMI-1640 with 1.5 ng/ml PDGFA was added in lower chamber, then cells in lower chamber were observed at low magnification (×40) after incubation for 3hrs.

Lower: The number of migrated cells were counted at high magnification (×400) randomly (five fields for each filter).



GTX00292-pro Image

WB analysis of GTX00292-pro Mouse PDGFA protein (active).



GTX00292-pro Image

SDS-PAGE analysis of GTX00292-pro Mouse PDGFA protein (active).



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