

Datasheet for ABIN6239857

Endothelin 1 Protein (EDN1) (AA 54-202) (His tag)



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3 Images

Overview

Quantity:	50 µg
Target:	Endothelin 1 (EDN1)
Protein Characteristics:	AA 54-202
Origin:	Rat
Source:	Escherichia coli (E. coli)
Biological Activity:	Active
Purification tag / Conjugate:	This Endothelin 1 protein is labelled with His tag.
Application:	Activity Assay (AcA), Cell Culture (CC)

Product Details

Characteristics:	Tag location: N-terminal His Tag
Purity:	> 95 %
Biological Activity Comment:	<p>Endothelins (EDN) are small (21 amino acids) vasoactive peptides produced by many cell types including endothelial and epithelial cells, macrophages and fibroblasts. By binding to G-protein-linked transmembrane receptors, EDNs participate in vasoconstriction modulation and cell growth regulation. It has been proven that EDN1 has chemotaxis active on monocytes, thus chemotaxis assay used 24-well microchemotaxis system was undertaken to detect the chemotactic effect of EDN1 on the human monocytic cell line THP-1. Briefly, THP-1 cells were seeded into the upper chambers (100µL cell suspension, 106cells/mL in RPMI 1640 with 0.5%FBS) and EDN1 (20ng/mL, 40ng/mL and 80ng/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,</p>

Product Details

then cells in low chamber were observed by inverted microscope at low magnification (x100) and the number of migrated cells were counted at high magnification (x400) randomly (five fields for each filter). Result shows EDN1 is able to induce migration of THP-1 cells. The migrated THP-1 cells in low chamber at low magnification (x100) were shown in Figure 1. Five fields of each chamber were randomly chosen, and the migrated cells were counted at high magnification (x400). Statistical results were shown in Figure 2. The optimum chemotaxis of EDN1 occurs at 80ng/mL.

Target Details

Target:	Endothelin 1 (EDN1)
Abstract:	EDN1 Products
Background:	Alternative Names: ET1, PPET1, Preproendothelin-1, Big endothelin-1
Molecular Weight:	19kDa
UniProt:	P22388
Pathways:	Hormone Transport , Negative Regulation of Hormone Secretion , Regulation of Systemic Arterial Blood Pressure by Hormones , cAMP Metabolic Process , Regulation of Muscle Cell Differentiation , Regulation of G-Protein Coupled Receptor Protein Signaling , Regulation of Cell Size

Application Details

Application Notes:	Isoelectric Point: 9.7
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	20 mM Tris, 150 mM NaCl, pH 8.0, containing 1 mM EDTA, 1 mM DTT, 0.01 % SKL, 5 % Trehalose and Proclin300.
Preservative:	Dithiothreitol (DTT), Other preservative, ProClin
Precaution of Use:	This product contains ProClin and Dithiothreitol (DTT): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.

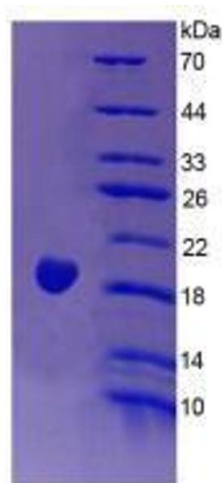


Image 1.

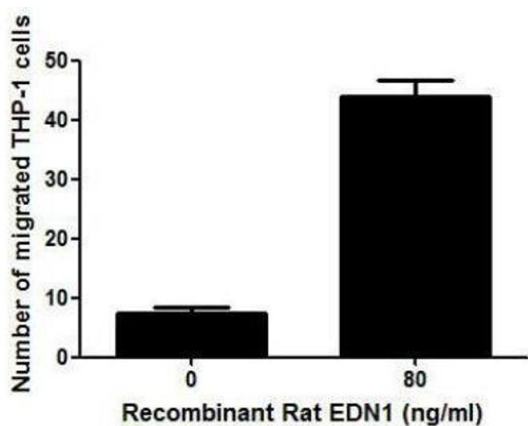


Image 2.

Figure 2. The chemotactic effect of EDN1 on THP-1 cells.

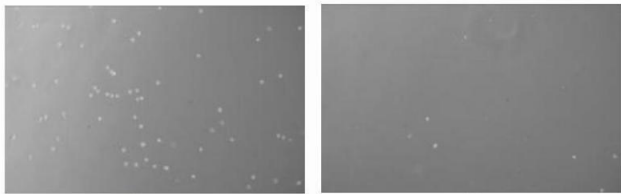


Figure 1. The chemotactic effect of EDN1 on THP1 cells.

(A) THP-1 cells were seeded into the upper chambers and serum free RPMI 1640 with 80ng/mL EDN1 was added in lower chamber, then cells in lower chamber were observed at low magnification (x100) after incubation for 3h;

(B) THP-1 cells were seeded into the upper chambers and serum free RPMI 1640 without EDN1 was added in lower chamber, then cells in lower chamber were observed at low magnification (x100) after incubation for 3h.

Image 3.