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## Product Datasheet

### Rat Endothelin 1 protein, His tag (active), Unconjugated GTX00345-PRO

Article Name	Rat Endothelin 1 protein, His tag (active), Unconjugated
Biozol Catalog Number	GTX00345-PRO
Supplier Catalog Number	GTX00345-pro
Alternative Catalog Number	GTX00345-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Rat
Conjugation	Unconjugated
NCBI	<a href="#">24323</a>
UniProt	<a href="#">P22388</a>
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, ProClin 300.
Expression System	E. coli
Form	Lyophilized powder
Sequence	N-terminal His-Tag, Ser54~His202 (NP_036680.1)

#### Application Notes

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 (100  $\mu$ l cell suspension,  $1 \times 10^6$  cells/ml in RPMI-1640 with 0.5% FBS) and EDN1 (20 ng/ml, 40 ng/ml and 80 ng/ml diluted separately in serum free RPMI-1640) was added in lower chamber with a polycarbonate filter (8  $\mu$ m pore size) used to separate the two compartments. After incubation at 37°C with 5% CO<sub>2</sub> for 3h, the filter was removed, then cells in low chamber were observed by inverted microscope at low magnification ( $\times 100$ ) and the number of migrated cells were counted at high magnification ( $\times 400$ ) randomly. EDN1 is able to induce migration of THP-1 cells, and the optimum chemotaxis of EDN1 occurs at 80 ng/ml.