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Product Datasheet

Rat CTGF protein, His and GST tag (active) GTX03797-PRO

Article Name	Rat CTGF protein, His and GST tag (active)
Biozol Catalog Number	GTX03797-PRO
Supplier Catalog Number	GTX03797-pro
Alternative Catalog Number	GTX03797-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA, WB
Species Reactivity	Rat
NCBI	64032
UniProt	Q9R1E9
Buffer	Reconstitute with 10mM PBS pH7.4 to 0.1-1.0mg/ml. Do not vortex. Lyophilized from PBS pH7.4, containing 0.01% SKL, 5% Trehalose, ProClin 300.
Expression System	E. coli
Form	Lyophilized powder
Sequence	N-terminal His-Tag, Gln25~Ala347 (NP_071602.1)

Application Notes

Connective Tissue Growth Factor (CTGF), also known as CCN2 is a matricellular protein of the CCN family of extracellular matrix-associated heparin-binding proteins. CTGF has important roles in many biological processes, including cell adhesion, migration, proliferation, angiogenesis, skeletal development, and tissue wound repair, and is critically involved in fibrotic disease and several forms of cancers. Besides, Actin Beta (ACTb) has been identified as an interactor of CTGF, thus a binding ELISA assay was conducted to detect the interaction of recombinant rat CTGF and recombinant rat ACTb. Briefly, CTGF were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 μ l were then transferred to ACTb-coated microtiter wells and incubated for 2h at 37C. Wells were washed with PBST and incubated for 1h with anti-CTGF 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 37C. Finally, add 50 μ l stop solution to the wells and read at 450nm immediately. The binding activity of CTGF and ACTb was in a dose dependent manner. To measure the effect of CTGF on cell adhesion, a general procedure performance as follows: 100 μ l PBS containing recombinant CTGF were incubated overnight at 4C in 96-well ELISA plates. Wells were blocked with 200 μ l PBS containing 3% BSA and then incubated for 1h at 37 C with 100 μ l PBS containing approximately 5×10^4 3T3 cells. Adherent cells were then fixed for 15 min with 5% formaldehyde and non-adherent cells were removed by washing each well three times with PBS. The remaining cells were incubated with 0.5% crystal violet for 10mins then counted at high magnification (*400) randomly.