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Product Datasheet

Human Hepcidin protein, His and Human IgG1 Fc tag, Unconjugated GTX00261-PRO

Article Name	Human Hepcidin protein, His and Human IgG1 Fc tag, Unconjugated
Biozol Catalog Number	GTX00261-PRO
Supplier Catalog Number	GTX00261-pro
Alternative Catalog Number	GTX00261-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Human
Conjugation	Unconjugated
NCBI	57817
UniProt	P81172
Buffer	Reconstitute with 10mM PBS (pH7.4) to 0.1-1.0mg/ml. Do not vortex. Lyophilized from PBS (pH7.4), 0.01% SKL, 1mM DTT, 5% Trehalose, ProClin 300.
Expression System	HEK293 cells
Form	Lyophilized powder
Sequence	N-terminal His-Tag and C-terminal Human IgG1 Fc-Tag, Ser25~Thr84 (NP_066998.1)

Application Notes

Hepcidin (Hepc) is a regulator of iron metabolism. Hepcidin inhibits iron transport by binding to the iron export channel ferroportin which is located on the basolateral surface of gut enterocytes and the plasma membrane of reticuloendothelial cells (macrophages). Hepcidin ultimately breaks down the transporter protein in the lysosome. Inhibiting ferroportin prevents iron from being exported and the iron is sequestered in the cells. Besides, Ferroportin (FPN) has been identified as an interactor of Hepc, thus a binding ELISA assay was conducted to detect the interaction of recombinant human Hepc and recombinant human FPN. Briefly, Hepc were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to FPN-coated microtiter wells and incubated for 2h at 37C. Wells were washed with PBST and incubated for 1h with anti-Hepc 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 µl stop solution to the wells and read at 450nm immediately. The binding activity of Hepc and FPN was in a dose dependent manner.