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Product Datasheet

Mouse Asporin protein, His tag, Unconjugated GTX00331-PRO

Article Name	Mouse Asporin protein, His tag, Unconjugated
Biozol Catalog Number	GTX00331-PRO
Supplier Catalog Number	GTX00331-pro
Alternative Catalog Number	GTX00331-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA, Receptor Binding Assays
Species Reactivity	Mouse
Conjugation	Unconjugated
NCBI	66695
UniProt	Q99MQ4
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, Lys16~Lys373 (NP_001165952.1)

Application Notes

Asporin (ASPN) is a protein belongs to a family of leucine-rich repeat (LRR) proteins implicated in cancer, osteoarthritis, and periodontal ligament mineralization. The protein negatively regulates chondrogenesis in the articular cartilage and periodontal ligament (PDL) differentiation, inhibits BMP2-induced cytodifferentiation of PDL cells and also inhibits the interaction between TGFB1 and TGF-beta receptor type II in the presence of heparin/heparan sulfate in vitro. In addition Lumican (LUM) and ASPN can contribute to the fibrinogenesis of cardiac remodeling of ICM, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse ASPN and recombinant mouse LUM. Briefly, ASPN were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to LUM-coated microtiter wells and incubated for 2h at 37C. Wells were washed with PBST and incubated for 1h with anti-ASPN 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 450 nm immediately. The binding activity of recombinant mouse ASPN and recombinant mouse LUM was shown in the Figure, the EC50 for this effect is 2.6 µg/ml.