

## Mouse Asporin protein, His tag

Cat. No. GTX00331-pro

|                     |                                 |
|---------------------|---------------------------------|
| <b>Applications</b> | Binding Assay, Functional Assay |
| <b>Species</b>      | Mouse                           |

**Package**  
10 µg

## Applications

## Application Note

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 TGFβ1 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 37°C. 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 37°C. 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 ug/mL.

## Properties

|                          |                                                                                                                                                                                  |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Form</b>              | Lyophilized powder                                                                                                                                                               |
| <b>Buffer</b>            | 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.                   |
| <b>Preservative</b>      | ProClin 300                                                                                                                                                                      |
| <b>Storage</b>           | For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles. |
| <b>Region/Sequence</b>   | N-terminal His-Tag; Lys16~Lys373 (NP_001165952.1)                                                                                                                                |
| <b>Expression System</b> | E. coli                                                                                                                                                                          |
| <b>Purity</b>            | > 95%                                                                                                                                                                            |
| <b>Endotoxin</b>         | < 1 EU/µg                                                                                                                                                                        |
| <b>Conjugation</b>       | Unconjugated                                                                                                                                                                     |
| <b>Note</b>              | For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.                                         |



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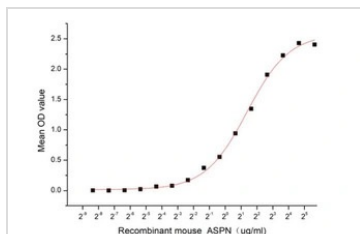
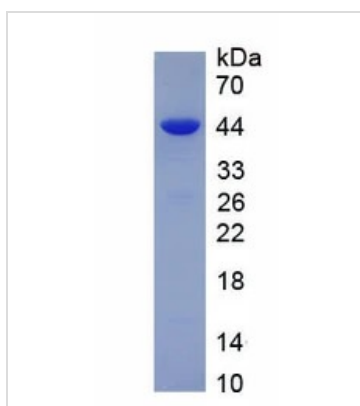
**DATA IMAGES**


Figure 1. The binding activity of recombinant mouse ASPN and recombinant mouse LUM

**GTX00331-pro Binding Assay Image**

ELISA analysis of GTX00331-pro Mouse Asporin protein, His tag which can bind recombinant Mouse Lumican/LUM Protein.


**GTX00331-pro Image**

SDS-PAGE analysis of GTX00331-pro Mouse Asporin protein, His tag.



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