

Mouse COL6A1 protein, His tag

Cat. No. GTX00317-pro

Applications Functional Assay

Species Mouse

Package

10 µg

Applications

Application Note

The collagens are a superfamily of proteins that play a role in maintaining the integrity of various tissues. Collagen VI is a major structural component of microfibrils. The basic structural unit of collagen VI is a heterotrimer of the alpha1(VI), alpha2(VI), and alpha3(VI) chains. The protein encoded by COL6a1 gene is the alpha 1 subunit of type VI collagen (alpha1(VI) chain). Mutations in the genes that code for the collagen VI subunits result in the autosomal dominant disorder, Bethlem myopathy. Besides, Retbindin (RTBDN) has been identified as an interactor of COL6a1, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse COL6a1 and recombinant mouse RTBDN. Briefly, COL6a1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to RTBDN-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-COL6a1 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 450nm immediately. The binding activity of COL6a1 and RTBDN was in a dose dependent manner.

Observed MW (kDa) 16 kDa.

Properties

Form Lyophilized powder

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.

Preservative ProClin 300

Storage 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.

Region/Sequence N-terminal His-Tag; Asn82~Phe212 (NP_034063.1)

Expression System E. coli

Purity > 95%

Endotoxin < 1 EU/µg

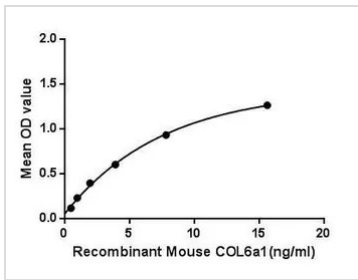
Conjugation Unconjugated

Note For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.



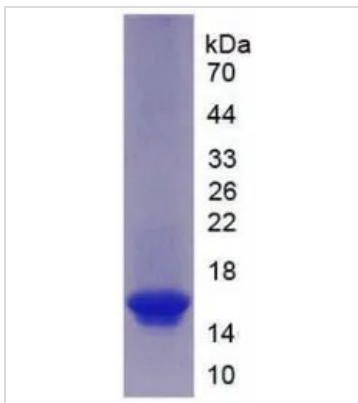
For full product information, images and publications, please visit our [website](#).

DATA IMAGES



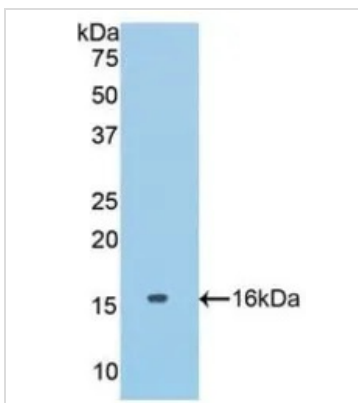
GTx00317-pro Functional Assay Image

Functional ELISA analysis of GTx00317-pro Mouse COL6A1 protein which can bind immobilized RTBDN protein.



GTx00317-pro Image

SDS-PAGE analysis of GTx00317-pro Mouse COL6A1 protein.



GTx00317-pro Image

WB analysis of GTx00317-pro Mouse COL6A1 protein.



For full product information, images and publications, please visit our [website](https://www.genetex.com).