

Mouse CD47 protein, His tag

Cat. No. GTX00311-pro

Applications Functional Assay

Species Mouse

Package

10 µg

Applications

Application Note

Integrin Associated Protein (IAP) also known as Cluster of Differentiation 47(CD47) is a transmembrane protein. CD47 belongs to the immunoglobulin superfamily and partners with membrane integrins and also binds the ligands thrombospondin-1 (TSP-1) and signal-regulatory protein alpha (SIRPα). CD47 is involved in a range of cellular processes, including apoptosis, proliferation, adhesion, and migration. Furthermore, it plays a key role in immune and angiogenic responses. CD47 is ubiquitously expressed in human cells and has been found to be overexpressed in many different tumor cells. Besides, Thrombospondin 1 (THBS1) has been identified as an interactor of IAP, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse IAP and recombinant mouse THBS1. Briefly, IAP were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to THBS1-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-IAP 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 IAP and THBS1 was in a dose dependent manner.

Observed MW (kDa) 23 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; Ala18~Gly219 (NP_034711.1)

Expression System E. coli

Purity > 90%

Endotoxin < 1 EU/µg

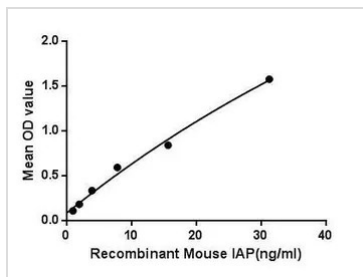
Conjugation Unconjugated

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



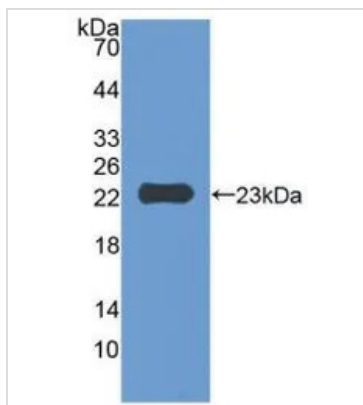
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DATA IMAGES



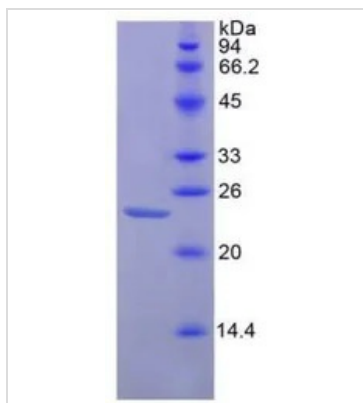
GTX00311-pro Functional Assay Image

Functional ELISA analysis of GTX00311-pro Mouse CD47 protein which can bind immobilized THBS1 protein.



GTX00311-pro Image

WB analysis of GTX00311-pro Mouse CD47 protein.



GTX00311-pro Image

SDS-PAGE analysis of GTX00311-pro Mouse CD47 protein.



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