

# Human PAPP A protein, His tag

**Cat. No. GTX00256-pro**

**Applications** Functional Assay

**Species** Human

**Package**

10 µg

## Applications

### Application Note

Pregnancy-associated plasma protein A (PAPPA), also known as pappalysin-1, is a secreted protease whose main substrate is insulin-like growth factor binding proteins. PAPPA's proteolytic function is activated upon collagen binding. It is thought to be involved in local proliferative processes such as wound healing and bone remodeling. Low plasma level of this protein has been suggested as a biochemical marker for pregnancies with aneuploid fetuses (fetuses with an abnormal number of chromosomes). Besides, Plasminogen (Plg) has been identified as an interactor of PAPPA, thus a binding ELISA assay was conducted to detect the interaction of recombinant human PAPPA and recombinant human Plg. Briefly, PAPPA were diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to Plg-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-PAPPA 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 PAPPA and Plg was in a dose dependent manner.

**Observed MW (kDa)** 37 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; Ala244~Leu501 (NP\_002572.2)

**Expression System** E. coli

**Purity** > 97%

**Endotoxin** < 1 EU/µg

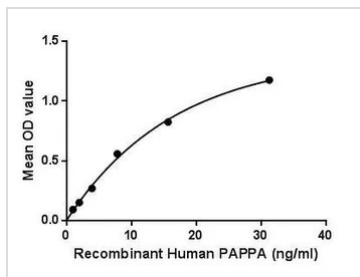
**Conjugation** Unconjugated

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



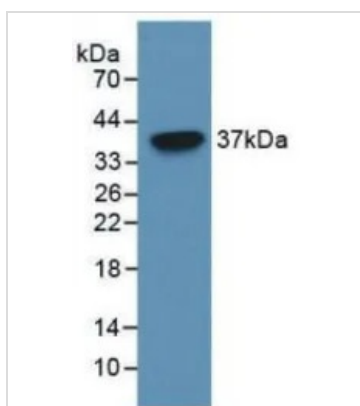
For full product information, images and publications, please visit our [website](https://www.genetex.com).

## DATA IMAGES



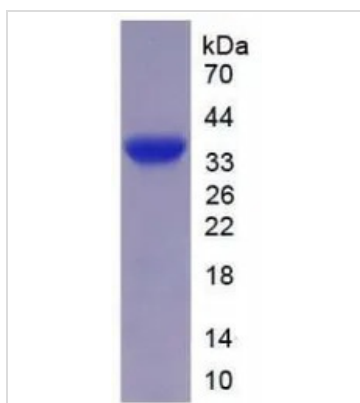
### GTX00256-pro Functional Assay Image

Functional ELISA analysis of GTX00256-pro Human PAPP A protein which can bind immobilized Plg protein.



### GTX00256-pro Image

WB analysis of GTX00256-pro Human PAPP A protein.



### GTX00256-pro Image

SDS-PAGE analysis of GTX00256-pro Human PAPP A protein.



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