

PAPP-A (D-15): sc-47301

BACKGROUND

Pregnancy-associated plasma protein-A (Pappalysin-1 or PAPP-A), also known as Insulin-like growth factor-dependent IGF-binding protein 4 (IGFBP-4) protease, is a member of the peptidase M43B family of proteins. PAPP-A, a metalloproteinase cleaves Insulin-like growth factor binding proteins IGFBP-4 and IGFBP-5, releasing bound IGF. PAPP-A is primarily expressed in septa and anchoring villi in placenta and is also expressed in pregnancy serum. Levels of PAPP-A increase throughout pregnancy. Lower levels of expression can be detected in kidney, prostate, breast, ovary and endometrial tissues. PAPP-A is a secreted protein that can form homodimers; in pregnancy serum PAPP-A may also form a heterotetramer with PRG-2.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PAPP (human) mapping to 9q33.1; Papp (mouse) mapping to 4 C1.

SOURCE

PAPP-A (D-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PAPP-A of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-47301 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PAPP-A (D-15) is recommended for detection of the metalloprotease domain of PAPP-A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PAPP-A (D-15) is also recommended for detection of the metalloprotease domain of PAPP-A in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PAPP-A siRNA (h): sc-61289, PAPP-A siRNA (m): sc-61290, PAPP-A shRNA Plasmid (h): sc-61289-SH, PAPP-A shRNA Plasmid (m): sc-61290-SH, PAPP-A shRNA (h) Lentiviral Particles: sc-61289-V and PAPP-A shRNA (m) Lentiviral Particles: sc-61290-V.

Molecular Weight of PAPP-A: 181 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.