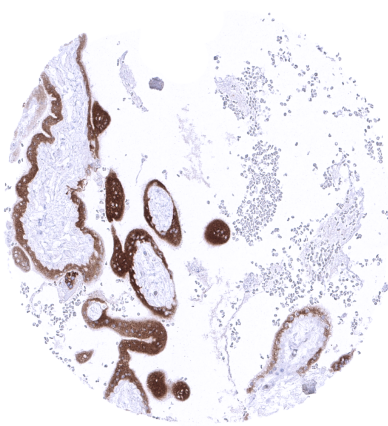


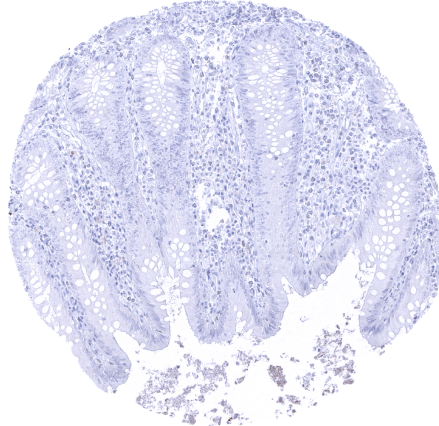
## Anti- PAPP-A Antibody MSVA-780M / Mouse monoclonal

Human SwissProt	Q13219
Human Gene Symbol	PAPPA
Synonyms	ASBABP2; Aspecific BCL2 ARE binding protein 2; Differentially placenta 1 expressed protein; DIPLA1; IGF-dependent; IGFBP4ase; Insulin-like growth factor-dependent IGF-binding protein 4 protease (IGFBP-4 protease); PAPA; PAPP A; PAPPA1; Pappalysin-1; Pregnancy Associated Plasma Protein A (PAPP-A)
Specificity	PAPP-A
Immunogen	Recombinant fragment of human PAPP-A protein
Isotype	Mouse / IgG
Species Reactivity	Human

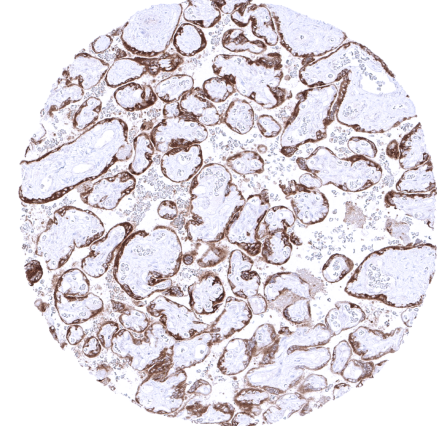
Localization	Secreted
Storage & Stability	Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. Antibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available without BSA
Positive Control	Placenta: Trophoplast and chorion cell should show a strong cytoplasmic papp-A staining.
Negative Control	Colon: Papp-A immunostaining should be completely absent in both stromal end epithelial cells.



Strong Papp-A immunostaining of trophoblast cells of a first trimester placenta.



Complete absence of Papp-A immunostaining in epithelial and stromal cells of the appendix mucosa.



Syncytiotrophoblast cells show strong papp-A immunostaining in a mature placenta.

### Biology

Pregnancy-associated plasma protein A (Papp-A) is a x kDa metalloproteinase encoded by the PAPPA gene located at chromosome x. The protein is secreted, activated upon collagen binding, and is thought to be involved in local proliferative processes such as wound healing and bone remodeling. Its main substrate is insulin-like growth factor binding proteins which are cleaved by Papp-A. Papp-A is mainly produced in the placenta and has been connected with paracrine and autocrine control of trophoblast invasion of the decidua. Low maternal serum PAPP-A concentrations have been implicated with preeclampsia and Down syndrome. Among normal tissues, papp-A is a placenta specific protein which is seen both in the early and mature placenta. Strongest papp-A immunostaining is seen in syncytiotrophoblast and in chorion cells. Staining may be less intense or even absent in the cytotrophoblast. Papp-A is so far not known to be expressed in cancers.

### Potential Research Applications

-It is currently unknown, whether Papp-A expression can occur in cancer.

### Protocol Suggestions

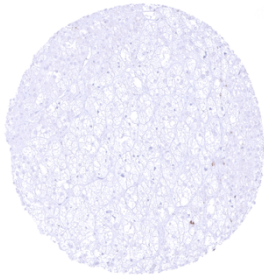
**Dilution: 1:100 ; pH 7,8 is optimal.** Freshly cut sections should be used (less than 10 days between cutting and staining deteriorates staining intensity for most antibodies in IHC).

### Limitations

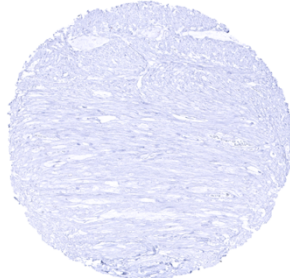
This antibody is available for **research use only** and is not approved for use in diagnostics.

### Warranty

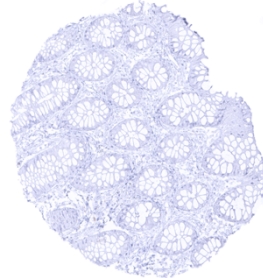
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



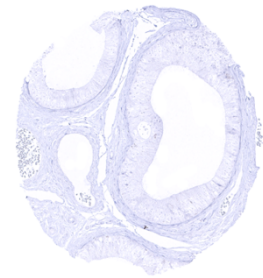
Adrenal gland



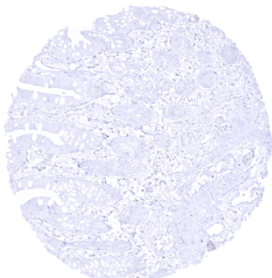
Appendix, muscular wall



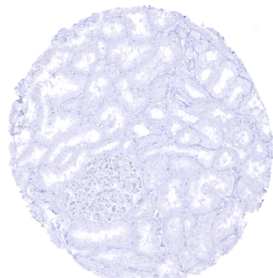
Colon descendens, mucosa



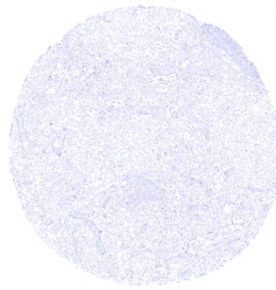
Epididymis



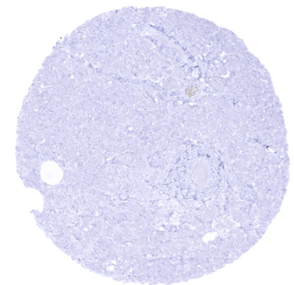
Ileum, mucosa



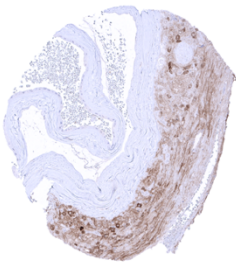
Kidney, cortex



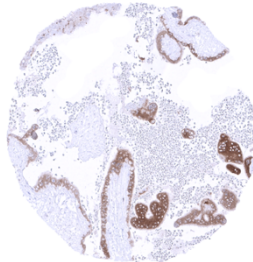
Lymph node



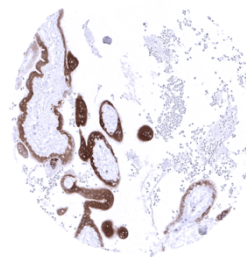
Pancreas



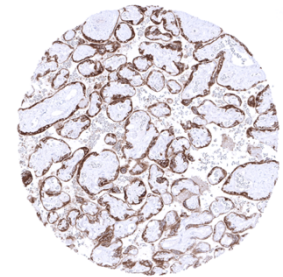
Placenta (amion and chorion) -  
Chorion cells show moderate to  
strong papp-A immunostaining.  
Staining is also seen in the stroma,  
probably due to the „secreted“  
nature of the protein



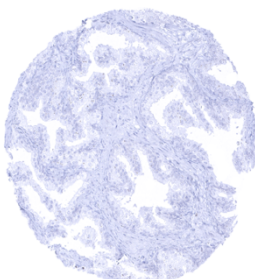
Placenta (first trimenon) -  
Trophoblast cells of a first trimenon  
placenta exhibiting a moderate to  
strong papp-A immunostaining



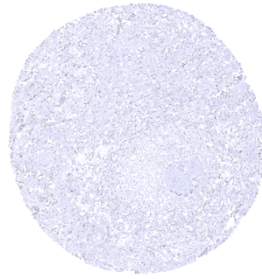
Placenta (first trimenon)- Strong  
papp-A immunostaining of  
trophoblast cells of a first trimenon  
placenta



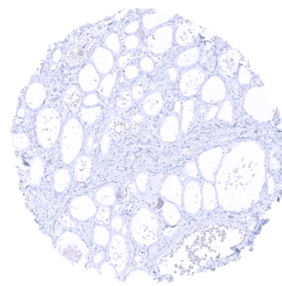
Placenta, mature -  
Syncytiotrophoblast cells show  
strong papp-A immunostaining in a  
mature placenta



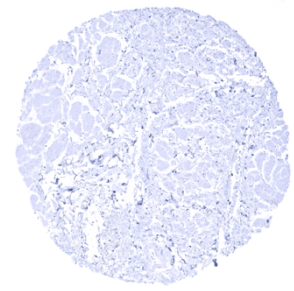
Prostate



Spleen



Thyroid gland



Urinary bladder, muscular wall