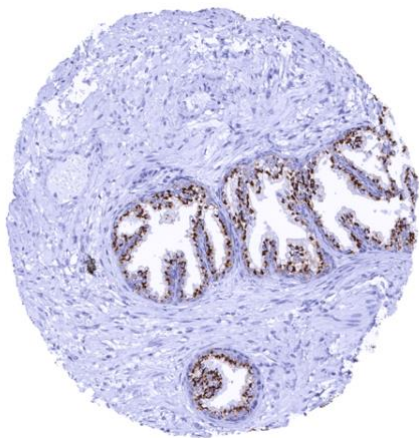


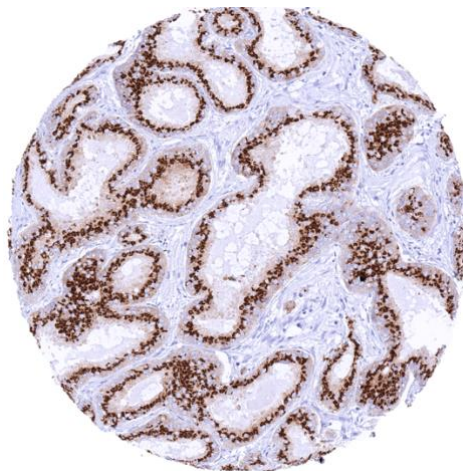
Anti- Prostein Antibody MSVA-460R / Recombinant Rabbit monoclonal

Human SwissProt	Q96JT2
Human Gene Symbol	SLC45A3
Synonyms	SLC45A3, PCANAP6, Prostate Cancer Associated Protein 6, IPCA-6
Specificity	Prostein
Immunogen	Synthesized peptides to the N terminus of human SLC45A3 protein
Isotype	Rabbit / IgG
Species Reactivity	Human

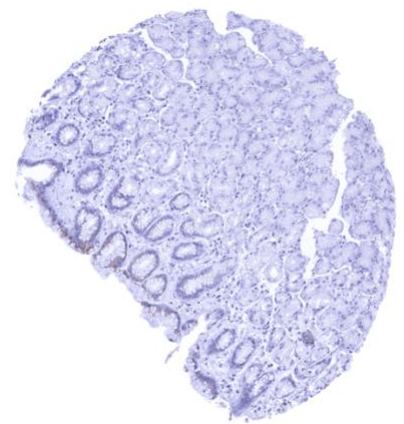
Localization	Membranous
Storage & Stability	Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. Antibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available without BSA
Positive Control	Stomach mucosa: At least a moderate, granular, cytoplasmic prostein positivity should be seen in surface epithelial cells.
Negative Control	Stomach mucosa: Prostein immunostaining should be absent in gastric glands.



Normal prostate with strong, granular, perinuclear cytoplasmic prostein staining of luminal cells



Prostatic adenocarcinoma (Gleason 3+3=6) with strong granular, perinuclear, cytoplasmic prostein staining of tumor cells



Stomach mucosa with granular cytoplasmic prostein staining of surface epithelial cells

Biology

Prostein (P501S), also termed solute carrier family 45 member 3 (SLC45A3) is a 553 amino acid protein encoded by the SLC45A3 gene located at chromosome 1q32-q42. Prostein is predominantly expressed in the prostate. Its expression is androgen regulated but its function is unknown. In prostate cancer, prostein acts as the second most common 5' partner gene in ERG rearrangements. In the brain, prostein is involved in the regulation of the lipid metabolism of oligodendrocytes and myelin. In normal tissues, prostein staining predominates in particularly strong in acinar cells of the prostate and occurs at lesser intensity in other cell types such as surface epithelium of the stomach, respiratory epithelium, the adenohypophysis, glia cells of the brain, and in few monocytic cells of the spleen and lymph nodes. Among tumors, prostein expression predominantly occurs in prostatic adenocarcinomas, but immunostaining can be also seen in various other cancer types.

Potential Research Applications

- The diagnostic utility of prostein as a marker for prostate cancer should be evaluated.
- The prognostic role of prostein expression levels in prostate cancer should be investigated.

-Given the expression of prostein in few non-prostatic tissues, the prevalence of its expression in corresponding tumors would be of interest.

-The function of prostein is unclear.

-The utility of prostein as a therapeutic target should be evaluated.

Protocol Suggestions

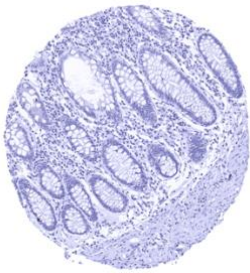
Dilution: 1:150. pH 7,8 is optimal. Freshly cut sections should be used (more than 10 days between cutting and staining deteriorates staining intensity for most antibodies in IHC).

Limitations

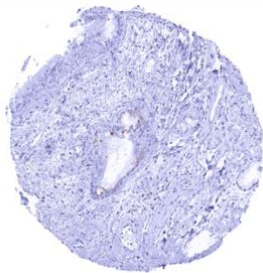
This antibody is available for **research use only** and is not approved for use in diagnostics.

Warranty

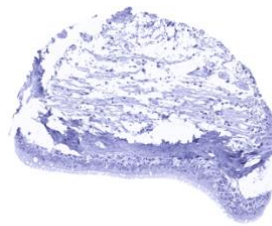
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



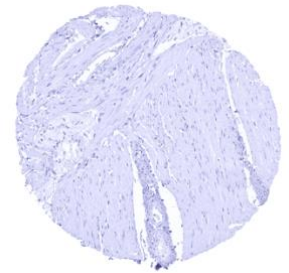
Appendix, mucosa - Prostein staining is lacking



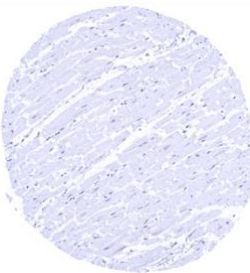
Bronchus, glands - Moderate granular, cytoplasmic and predominantly perinuclear prostein staining in goblet cells of respiratory epithelium



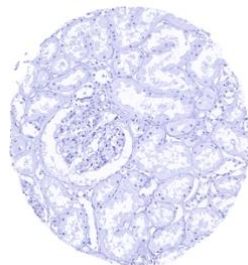
Bronchus, mucosa - Prostein staining is lacking in this respiratory epithelium which is not containing goblet cells



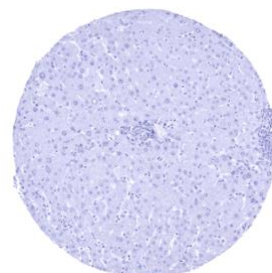
Colon descendens, muscular wall



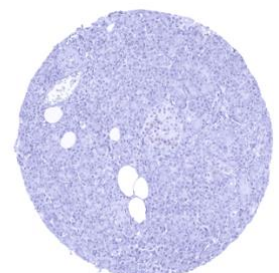
Heart muscle



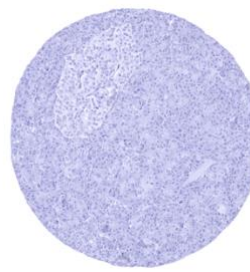
Kidney, cortex



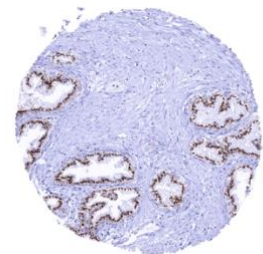
Liver



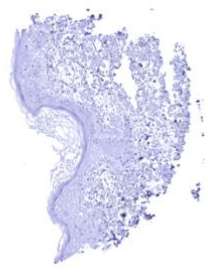
Pancreas - A weak, granular cytoplasmic prostein staining can be seen in a subset of pancreatic islet cells



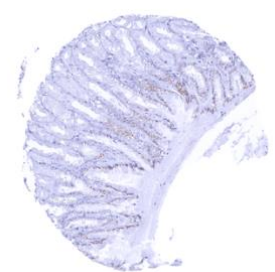
Pancreas - Pancreatic islet cells are prostein negative in his sample



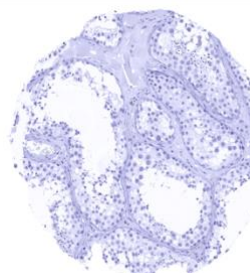
Prostate - Intense granular, cytoplasmic prostein staining of luminal cells of the prostate (prostein immunohistochemistry)



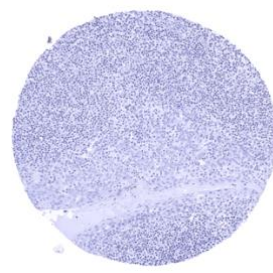
Skin



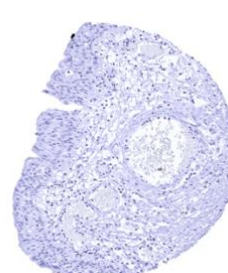
Stomach, corpus - Granular cytoplasmic prostein staining of moderate intensity in surface epithelial cells (prostein immunohistochemistry)



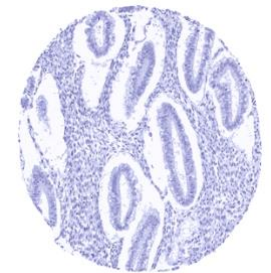
Testis



Tonsil



Urinary bladder, urothelium



Uterus, endometrium (secretion)