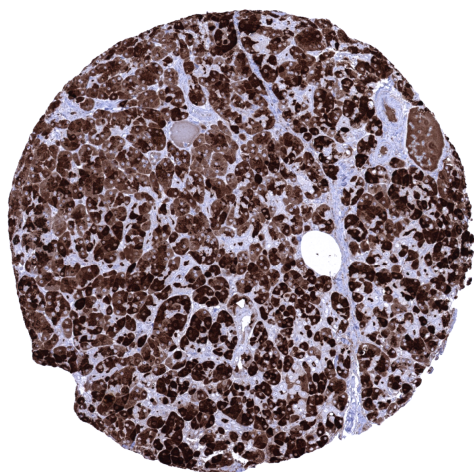


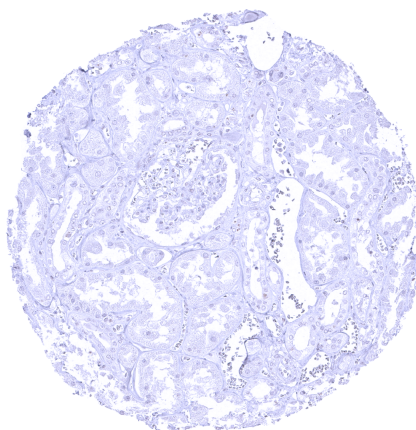
Anti-CELA3B Antibody MSVA-410M / Recombinant Mouse monoclonal

Human SwissProt	P08861
Human Gene Symbol	CELA3B
Synonyms	Chymotrypsin like elastase family member 3B (CELA3B); ELA3B; Elastase IIIB; Protease E
Specificity	CELA3B
Immunogen	Recombinant fragment of human CELA3B protein
Isotype	Mouse / IgG
Species Reactivity	Human
Localization	Cytoplasmic

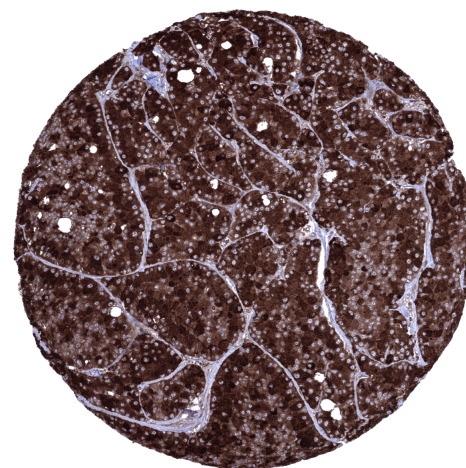
Storage & Stability	Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. A ntibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Positive Control	Pancreas: Acinar cells should show a strong CELA3B immunostaining with apical predominance.
Negative Control	Kidney: CELA3B staining should be absent in epithelial cells.



Normal pancreas with strong CELA3B positivity of acinar cells.



CELA3B immunostaining is absent in kidney tissue.



Acinar cell carcinoma of the pancreas exhibiting a strong CELA3B immunostaining of all tumor cells.

Biology

Chymotrypsin-like elastase family member 3B also known as elastase-3B, is a 29 kDa protein encoded by the CELA3B gene located at 1p36.12. Elastases form a six member subfamily of serine proteases that hydrolyze elastin and other proteins. Elastase 3B has little elastolytic activity. Elastase 3B is secreted from the pancreas as a zymogen and has a digestive function in the intestine. Elastase 3B preferentially cleaves proteins after alanine residues. It also plays a role in the intestinal transport and metabolism of cholesterol. Quantification of the fecal excretion of elastase 3B is commonly used to measure the pancreatic function in clinical assays. In normal tissues, CELA3B is predominantly expressed in the pancreas where a strong immunostaining is seen in all acinar cells and in a fraction of ductal cells. A - much weaker - CELA3B staining can also be seen at the apical membranes of surface epithelial cells in the small intestine and the colorectum. Among cancers, CELA3B is expressed in the majority of acinar cell carcinomas of the pancreas. A lower level of CELA3B expression may rarely be seen in several other tumor entities.

Potential Research Applications

-the diagnostic utility of CELA3B immunohistochemistry for the distinction of pancreatic acinar cell carcinomas from other pancreatic and extra-pancreatic neoplasms should be investigated.

-the function of CELA3B is largely unknown and needs to be investigated.
-the prevalence of CELA3b expression is unknown for most tumor entities

Protocol Suggestions

Dilution: 1:150. 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).

Potential pitfall

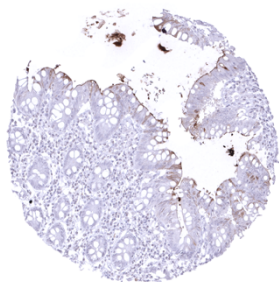
Normal pancreatic tissue (strongly positive for CELA3B) entrapped between tumor cells can be mistaken for tumor cell positivity.

Limitations

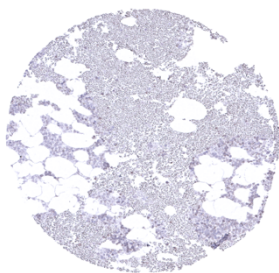
This antibody is available for **research use only** and is not approved for use in diagnostics. Not for resale without express authorization.

Warranty

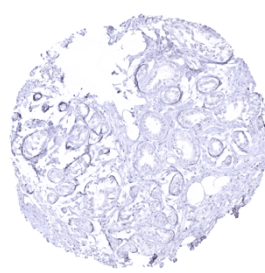
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



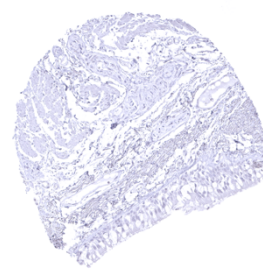
Appendix, mucosa - Weak to moderate CELA3B immunostaining of the apical membranes of surface epithelial cells of the appendix mucosa



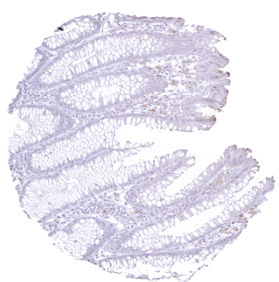
Bone marrow



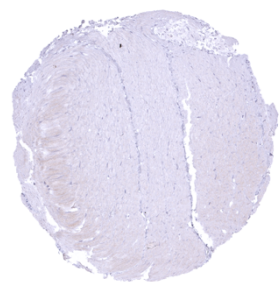
Breast



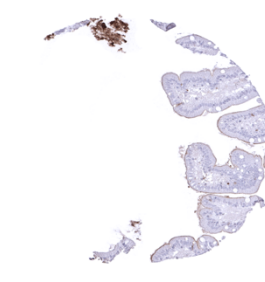
Bronchus, mucosa



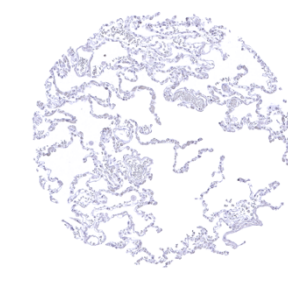
Colon descendens, mucosa



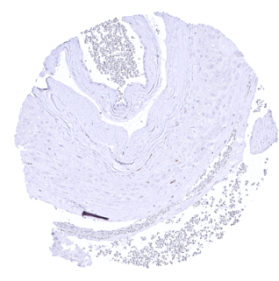
Colon descendens, muscular wall



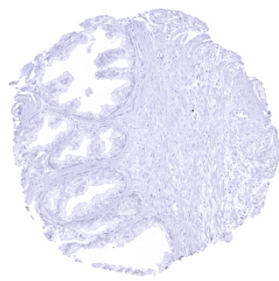
Ileum, mucosa - Weak to moderate CELA3B immunostaining of the apical membranes of surface epithelial cells of the ileum mucosa



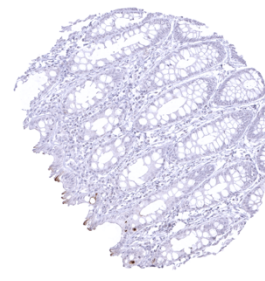
Lung



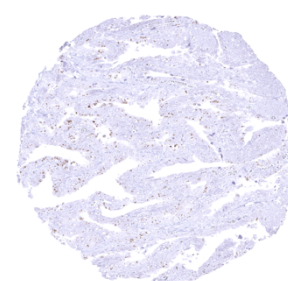
Placenta (amnion and chorion)



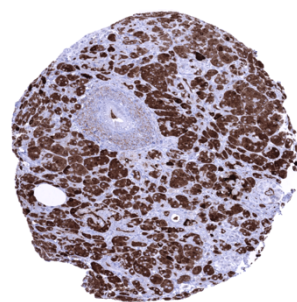
Prostate



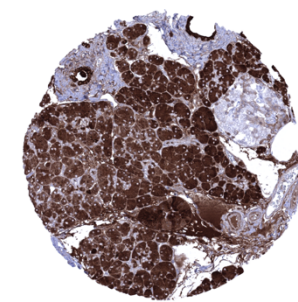
Rectum, mucosa



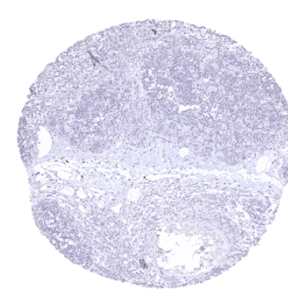
Seminal vesicle



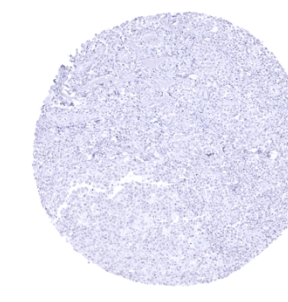
Strong cytoplasmic CELA3B immunostaining of pancreatic acinar cells. Excretory ducts are CELA3B negative but contain CELA3B positive material



Strong cytoplasmic CELA3B positivity of pancreatic acinar cells and of excretory ducts. Some cells of islets of Langerhans show weak CELA3B immunostaining



Thymus



Tonsil