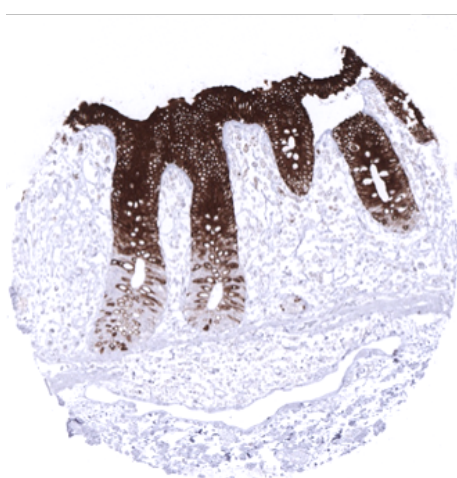


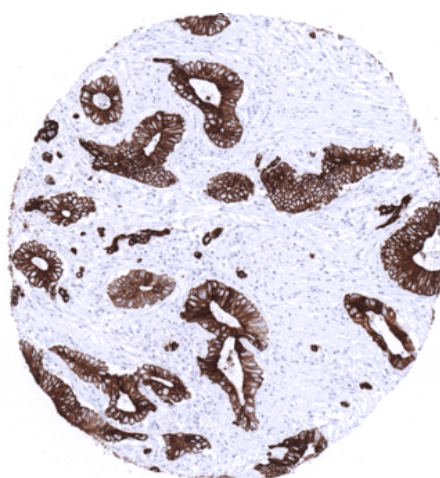
Anti-Cytokeratin 20 Antibody MSVA-620R / Recombinant Rabbit monoclonal

Human SwissProt	P35900
Human Gene Symbol	KRT20
Synonyms	CK20; Cytokeratin-20; K20; KA20; Keratin 20; keratin 20, type I; Keratin type I cytoskeletal 20; Keratin-20; KRT20
Specificity	Cytokeratin 20
Immunogen	Recombinant fragment of human CK20 protein
Isotype	Rabbit / IgG, kappa
Species Reactivity	Human
Localization	Cytoplasmic

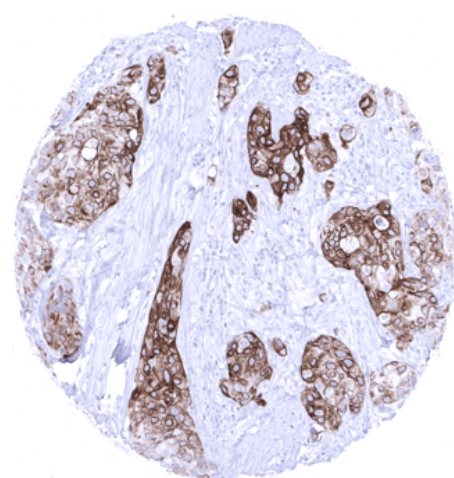
Storage & Stability	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	Purified antibody in Tris pH 7,3-7,7 with 1% BSA, <0,1% NaN ₃ .
Positive Control	Colon mucosa: Staining should be strong at the surface and at least moderate at the basis of crypts.
Negative Control	All cells of tonsil, kidney, and many other organs must stain negative.



Normal colon shows strong CK20 staining at the surface and a moderate staining at the basis of crypts.



Strong CK20 immunostaining in a colorectal adenocarcinoma.



Muscle-invasive urothelial carcinoma of the urinary bladder with moderate to strong CK20 positivity.

Biology

Cytokeratin 20 (CK20) is an acidic low molecular weight Type I cytokeratin. It is an integral part of the cytoskeleton of various epithelial cell types of the gastrointestinal tract. Because of its preferential expression in specific cell types, CK20 immunohistochemistry can be used for defining the origin of cancer tissues. In normal tissues, CK20 expression is limited to the gastrointestinal tract and umbrella cells of the urothelium. In the stomach, mucosa surface cell layers show moderate to strong CK20 positivity, while only few cells stain in the neck of the glands and staining is absent in the deep glands. From the duodenum to the rectum a strong CK20 staining is always seen in intestinal surface epithelial cells and both the fraction of positive cells and the staining intensity decreases towards the basis of glands. Skin and non-keratinizing squamous epithelium of oral cavity, lip, tonsil surface and crypts, ectocervix, and esophagus as well as Hassall's corpuscles in the thymus are always CK20 negative. CK20 staining is further absent in all mesenchymal tissues including myometrium, lymphatic and hematopoietic cells, liver, kidney, gall bladder epithelium, salivary glands, Brunner glands, prostate, seminal vesicle, epididymis, testis, respiratory epithelium, lung, breast, endocervix, endometrium, ovary including corpus luteum and follicular cysts, placenta, adrenal gland, thyroid, cerebrum, cerebellum, adeno- and neurohypophysis. Because of a highly complementary staining pattern with CK7, CK20 IHC is often used together with CK7.

Potential Research Applications

-As the literature is partly confusing, the diagnostic utility of KRT20 expression

analysis (in combination with KRT7 analysis) should be investigated in a large cohort of tumors from different entities.

-The biologic/clinical significance of aberrant KRT20 expression in cancers should be evaluated (for example: what are the specific properties of KRT20 negative colorectal cancers or of CK20 positive prostate cancers?).

Protocol Suggestions

Dilution 1:150 pH 7,8 is optimal. Freshly cut sections should be used (less than 10 days between cutting and staining).

Suggested manual protocol: heat-induced antigen retrieval for 5 minutes in an autoclave at 121°C in pH 9,0 buffer. Apply MSVA-620R at 37°C for 60 minutes at a dilution of 1:150.

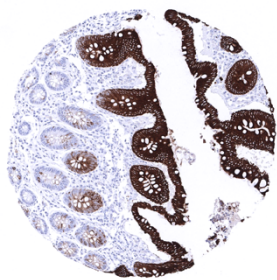
Limitations

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

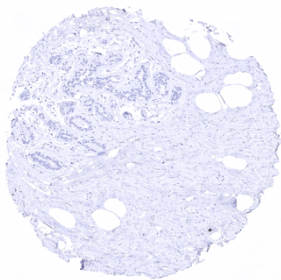
Not for resale without express authorization.

Warranty

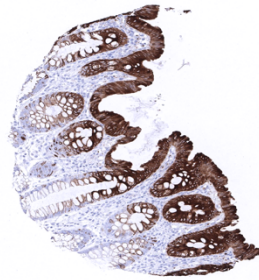
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



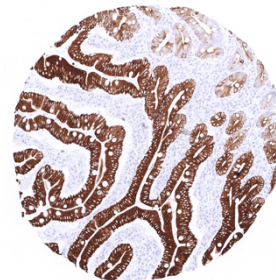
Appendix, mucosa



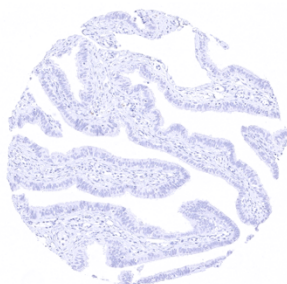
Breasts



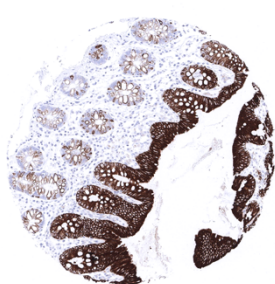
Colon descendens, mucosa



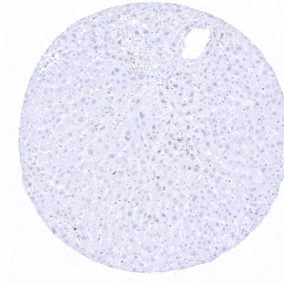
Duodenum, mucosa



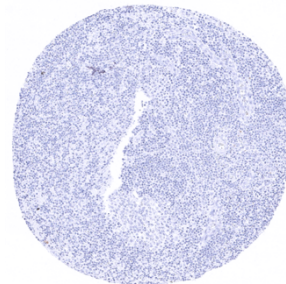
Fallopian tube, mucosa



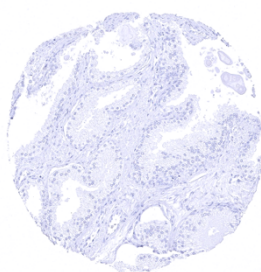
Ileum, mucosa



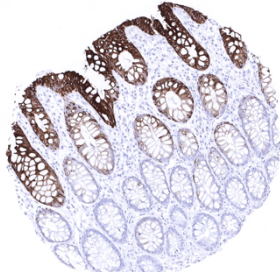
Liver



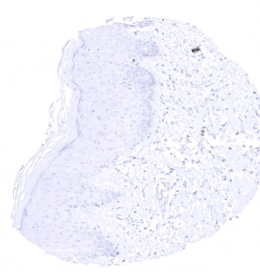
Lymph node



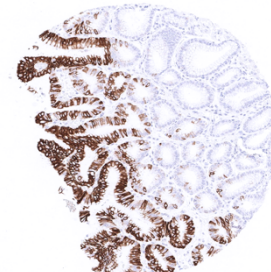
Prostate



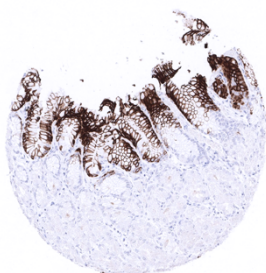
Rectum, mucosa



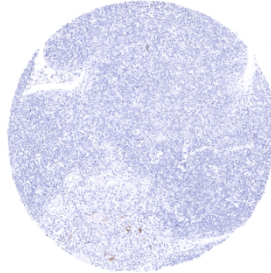
Skin



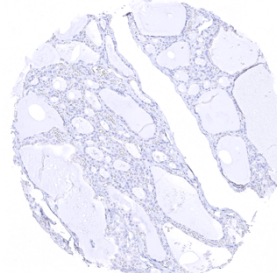
Stomach, antrum



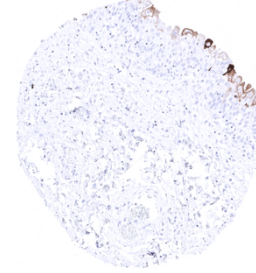
Stomach, corpus



Thymus



Thyroid gland



Urinary bladder, urothelium - CK20
immunostaining of umbrella cells in
normal urothelium