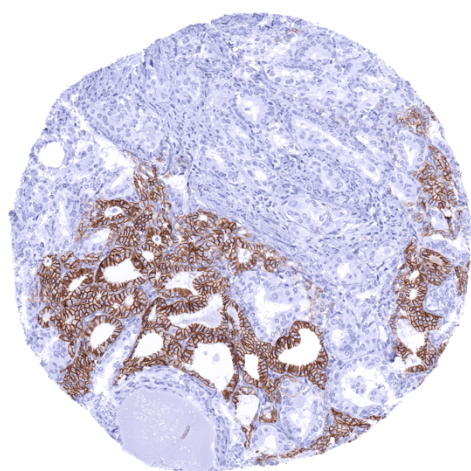


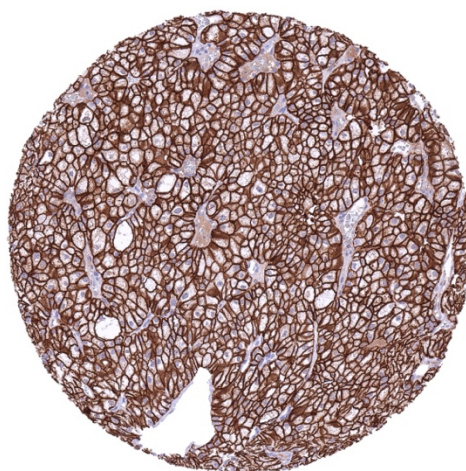
Anti- Cadherin-16 / CDH16 Antibody MSVA-516R / Recombinant Rabbit monoclonal

Human SwissProt	O75309
Human Gene Symbol	CDH16
Synonyms	Cadherin-16 (CDH16); Kidney-specific cadherin; Ksp-cadherin antibody
Specificity	CDH16
Immunogen	Recombinant human CDH16 fragment
Isotype	Rabbit / IgG
Species Reactivity	Human
Localization	Cell Surface and Cytoplasmic

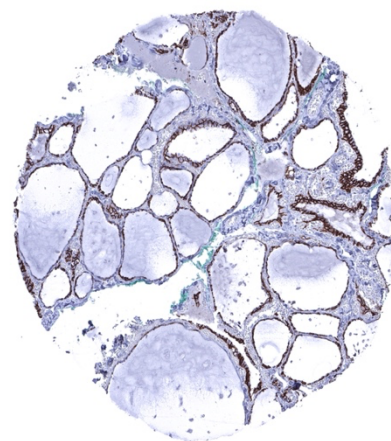
Storage & Stability	Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. Antibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available without BSA
Positive Control	Kidney: A strong staining should be seen in distal tubuli and collecting ducts while the staining is at least moderate in proximal tubuli.
Negative Control	Colon: All cells should be CDH16 negative.



Thyroid - CDH16 negative papillary carcinoma invading CDH16 positive normal thyroid



Kidney - Chromophobe renal cell carcinoma with strong CDH16 immunostaining of tumor cells



Thyroid gland - Strong membranous CDH16 staining of follicle cells

Biology

Cadherin-16, coded by the CDH16 gene at 16q22.1, belongs to the cadherin superfamily which is composed of calcium-dependent, membrane-associated glycoproteins with a role in cell-adhesion. CDH16 is involved in embryonal development and cell growth. CDH16 supports the formation of tubuli during renal development and remains expressed in distal tubuli of adult kidneys. CDH16 has therefore also been termed kidney specific cadherin (ksp-cadherin) but the protein is also relevant for the development of follicular thyroid cells and thyroid follicular polarity. CDH16 immunostaining is predominantly seen in the kidney, thyroid and the epididymis. In the kidney, CDH16 immunostaining is stronger in distal tubuli and collecting ducts than in proximal tubuli. The staining pattern is membranous (predominantly basolateral) and also cytoplasmic. In the thyroid, a strong membranous CDH16 staining occurs in follicle cells. In the epididymis, a predominantly membranous but also cytoplasmic staining is preferably seen in epithelial cells of the cauda while staining is absent or markedly weaker in the caput. Among cancers, a positive CDH16 immunostaining is most commonly seen in kidney cancer. CDH16 expression also occurs in cancers of the thyroid, uterine cervix, endometrium and the ovary.

Potential Research Applications

- The diagnostic utility of CDH16 immunostaining should be evaluated in studies comparing CDH16 staining in a broad range of different cancers.
- The prognostic role of CDH16 expression loss should be investigated in cancers of the kidney and of the thyroid.

Protocol Suggestions

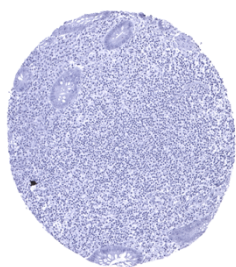
Dilution: 1:150 ; pH 7,8 is optimal. Freshly cut sections should be used (more than 10 days between cutting and staining deteriorates staining intensity for most antibodies in IHC).

Limitations

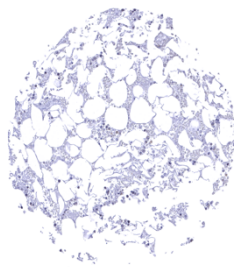
This antibody is available for **research use only** and is not approved for use in diagnostics.

Warranty

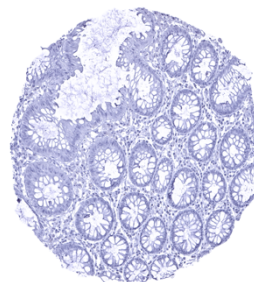
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



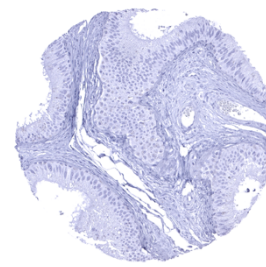
Appendix, mucosa



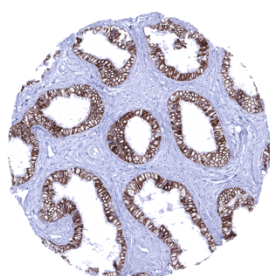
Bone marrow



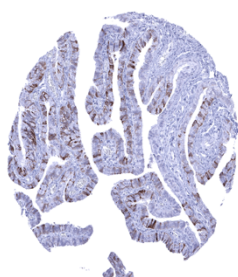
Colon descendens, mucosa



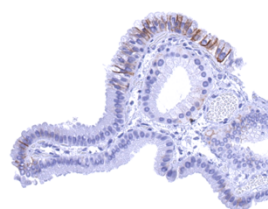
Epididymis - CDH16 staining is absent in the caput epididymis



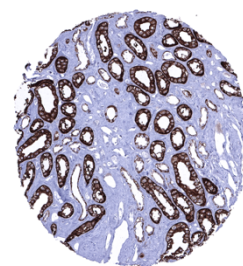
Epididymis - Strong membranous CDH16 staining of epithelial cells in the cauda epididymis



Fallopian tube, mucosa - A membranous CDH16 staining of a fraction of epithelial cells can be seen in the fallopian tube



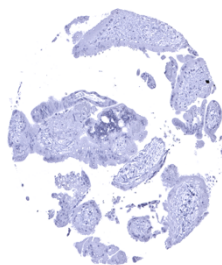
Gallbladder, epithelium - A focal CDH16 staining is seen in this gallbladder sample



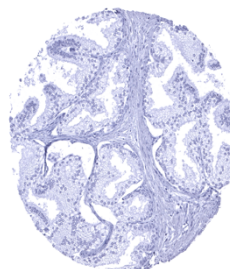
Kidney, medulla - Strong and predominantly membranous CDH16 immunostaining of collecting duct cells



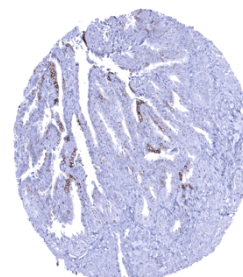
Lung



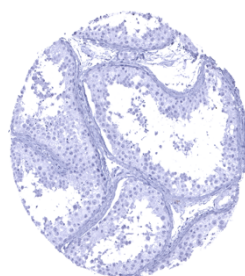
Placenta, early



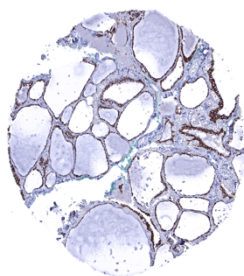
Prostate



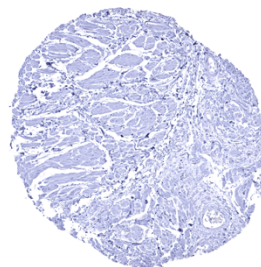
Seminal vesicle - A small fraction of epithelial cells, often arranged in groups, shows a moderate to strong membranous CDH16 staining



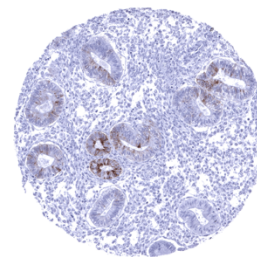
Testis



Thyroid gland - Strong membranous CDH16 staining of follicle cells



Urinary bladder, muscular wall



Uterus, endometrium (proliferation) - A focal membranous CDH16 staining of a fraction of glands can be seen in the endometrium