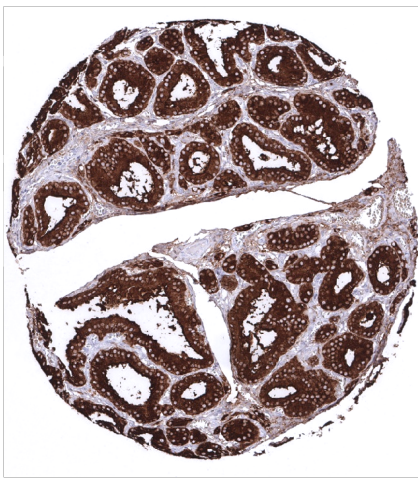


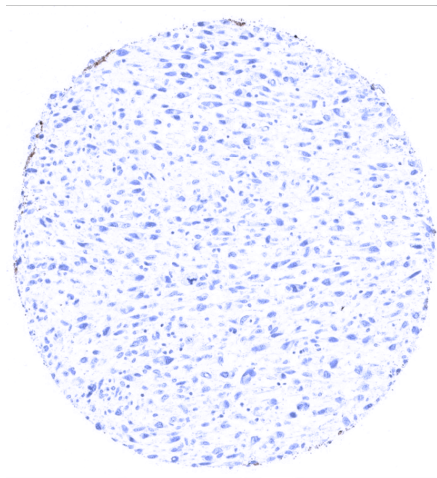
Anti- Thyroglobulin Antibody MSVA-189R / Recombinant Rabbit monoclonal

Human SwissProt	P01266
Human Gene Symbol	TG
Synonyms	AITD3, hTG, TDH3, Tg, Tgn
Specificity	Thyroglobulin
Immunogen	Recombinant human Thyroglobulin protein
Isotype	Rabbit / IgG
Species Reactivity	Human
Localization	Cytoplasmic, Secreted

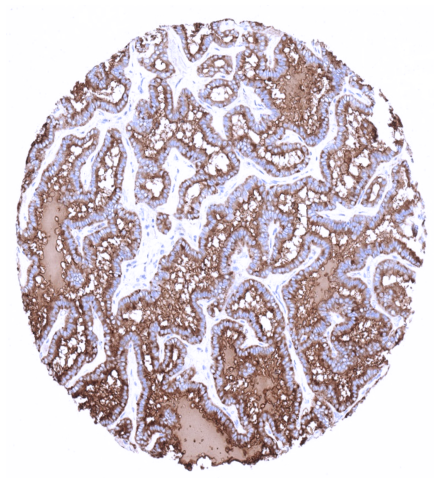
Storage & Stability	Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. Antibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available without BSA
Positive Control	Tonsil tissue shows a strong staining of follicular cells, colloid and of the stroma (contamination).
Negative Control	Colon: all epithelial and stroma cells should not show any staining.



Very intense thyroglobulin immunostaining in follicular cells. Due to the large quantity of thyroglobulin in a normal thyroid (50% of the protein mass), some thyroglobulin staining can also occur in interfollicular stroma.



Thyroglobulin negative anaplastic thyroid cancer.



Strong thyroglobulin positivity in a papillary thyroid cancer.

Biology

Thyroglobulin (TG) is the principal precursor protein of the thyroid hormones thyroxine (T4) and triiodothyronine (T3), which is produced by the follicular cells of the thyroid and secreted and accumulated in the thyroid follicles. The protein is essential for storage of T3 and T4 which remain attached to TG in the follicular colloid. Only after stimulation by the thyroid stimulating hormone (TSH), colloid is endocytosed from the follicular lumen into the surrounding thyroid follicular epithelial cells where the colloid is cleaved by proteases to release T3 and T4. In normal tissues, TG exclusively occurs in thyroid tissue.

Potential Research Applications

/

Potential pitfall

In the thyroid gland, TG immunostaining is often not limited to follicular epithelial cells but also involves stroma and other cell types. This is due to the

abundance of TG in the thyroid which makes up for about 50% of the organs protein mass and results in adjacent tissue contamination. For the same reason, a positive immunostaining is often seen in metastases from extra-thyroidal tumors to the thyroid and in non-thyroglobulin expressing thyroid tumors such as medullary cancer.

Protocol Suggestions

Dilution: 1:150, pH 6,0 is optimal. Freshly cut sections should be used (less than 10 days between cutting and staining deteriorates staining intensity for most antibodies in IHC).

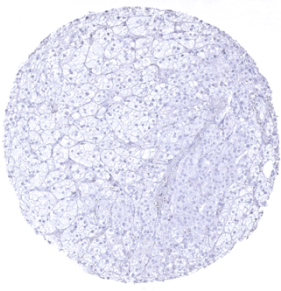
Limitations

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

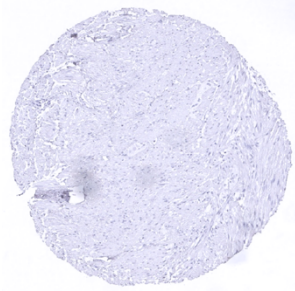
Not for resale without express authorization.

Warranty

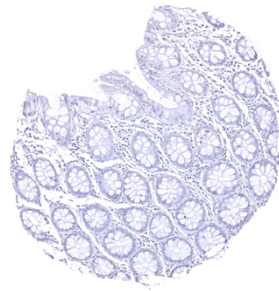
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



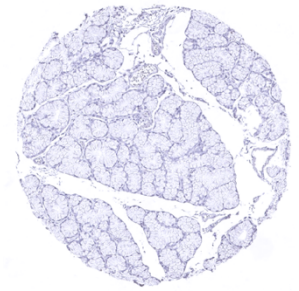
Adrenal gland



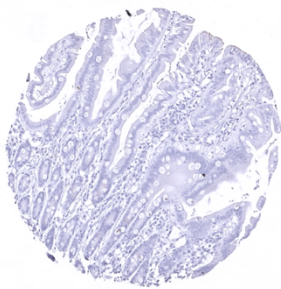
Appendix, muscular wall



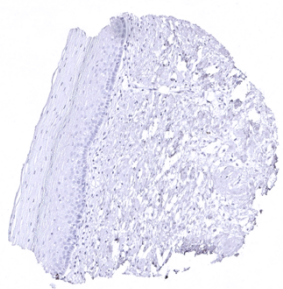
Colon descendens, mucosa



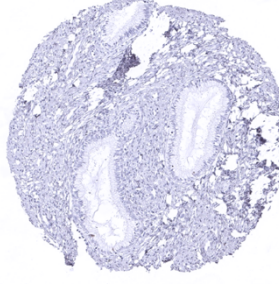
Duodenum, Brunner gland



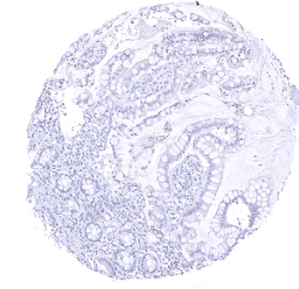
Duodenum, mucosa



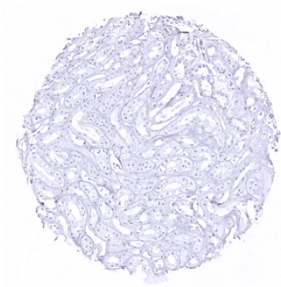
Ectocervix



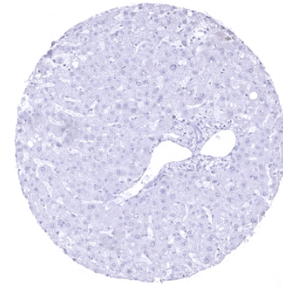
Endocervix



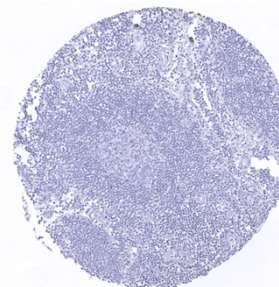
Ileum, mucosa



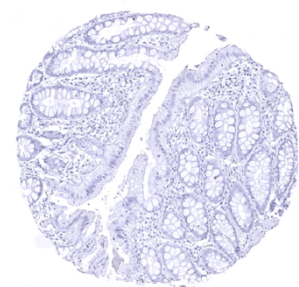
Kidney, medulla



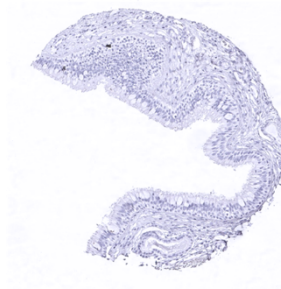
Liver



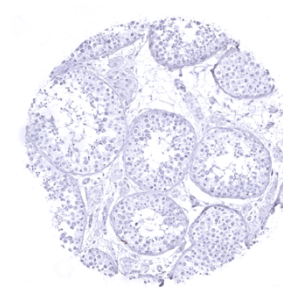
Lymph node



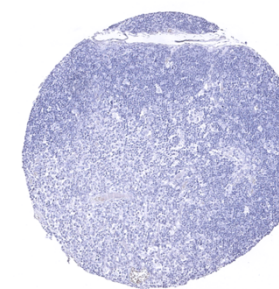
Rectum, mucosa



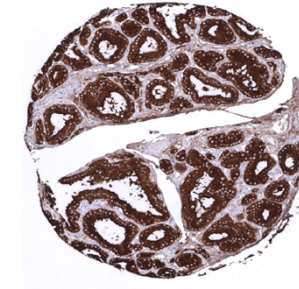
Sinus paranasales



Testis



Thymus



Thyroid gland