

Cell Marque™ Tissue Diagnostics

TROP2 (EP431)

Rabbit Monoclonal Primary Antibody

Trophoblast antigen 2 (TROP2) is a transmembrane glycoprotein that transduces intracellular calcium signals¹. The overexpression of TROP2 has been linked to tumor progression due to its involvement in the regulation of multiple vital cell processes including migration, proliferation, and invasion². TROP2 exhibits strong, diffuse staining in papillary thyroid carcinoma, while staining in other thyroid lesions, such as follicular thyroid adenomas and carcinomas, is limited to rare, focal, or scattered cells^{3,4}. An increase in TROP2 expression has also been observed in colorectal carcinomas and ovarian serous carcinomas compared to non-neoplastic ovary and colon⁵.

References:

1. Ripani E, et al. Human TROP-2 is a tumor-associated calcium signal transducer. *Int J Cancer*. 1998;76:671-676.
2. Wu B, et al. Overexpression of TROP2 promotes proliferation and invasion of ovarian cancer cells. *Exp Ther Med*. 2017;14:1947-1952.
3. Bychkov A, et al. TROP-2 immunohistochemistry: a highly accurate method in the differential diagnosis of papillary thyroid carcinoma. *Pathology*. 2016;48:425-433.
4. Liu H, et al. The Potential Diagnostic Utility of TROP-2 in Thyroid Neoplasms. *Appl Immunohistochem Mol Morphol*. 2017;25:525-533.
5. Stephan LP, et al. Expression of Trop2 Cell Surface Glycoprotein in Normal and Tumor Tissues. *J Histochem Cytochem*. 2011;59:701-710.

Intended Use:

TROP2 (EP431) Rabbit Monoclonal Primary Antibody is intended for laboratory use in the detection of the TROP2 protein in formalin-fixed, paraffin-embedded tissue stained in qualitative immunohistochemistry (IHC) testing. This product is not a stand-alone diagnostic, and cannot be used for diagnosis, treatment, prevention, or mitigation of disease.

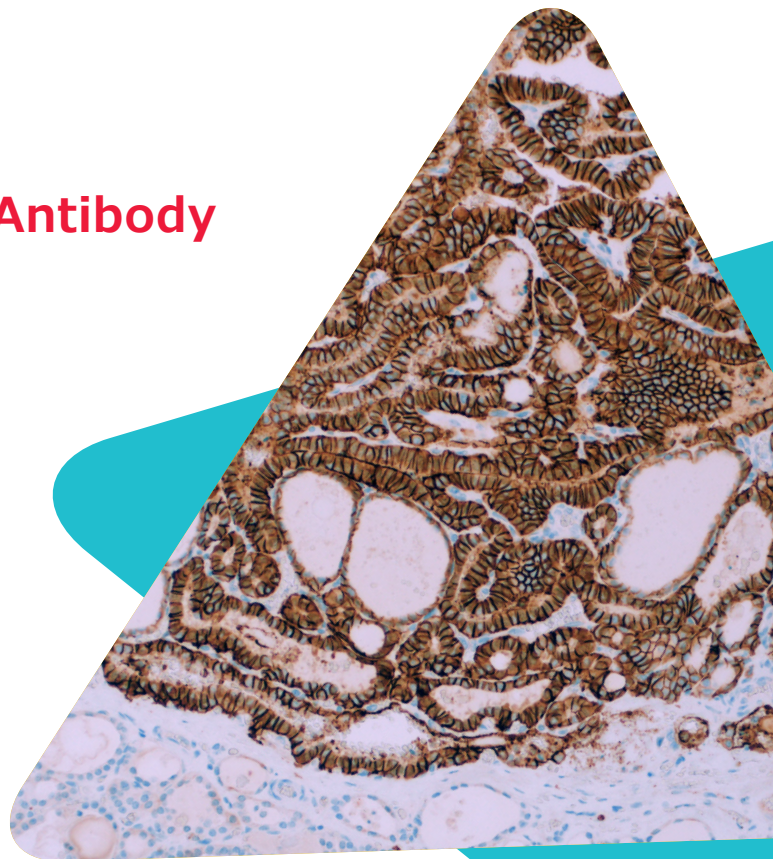
Product Information:

Visualization: Cytoplasmic, Membranous

Controls: Papillary Thyroid Carcinoma

Dilution Range: 1:25-1:100

Associated Specialty: Cytopathology



TROP2 on papillary thyroid carcinoma.

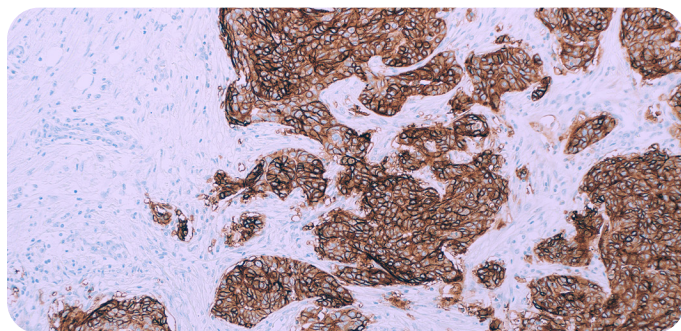
Ordering Information

Description	Cat No.
0.1 mL concentrate	465R-14
0.5 mL concentrate	465R-15
1.0 mL concentrate	465R-16
1.0 mL predilute	465R-17
7.0 mL predilute	465R-18

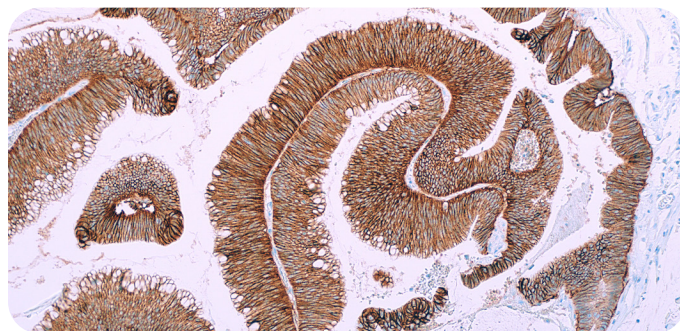


Thyroid: Malignant vs. Benign Lesions

Thyroid lesions	Diffuse TROP2	Diffuse CK 19	Galectin-3	HBME-1	Calcitonin	Thyroglobulin	TTF-1
Medullary Carcinoma	-	-	-	+	+	-	+
Papillary Carcinoma	+	+	+	+	-	+	+
Follicular Carcinoma	-	-	+	+/-	-	+	+
Follicular Adenoma	-	-	-	-	-	+	+
Hyperplastic Follicular Nodules	-	-	-	-	-	+	+



TROP2 on high grade ovarian serous carcinoma.



TROP2 on colorectal carcinoma.

We strive to be complete and accurate in the presentation of this reference guide; however, we assume no liability for any reliance on any of the contents of this reference guide including but not limited to any of the antibody grids. Furthermore, we assume no liability for any omissions. It is the sole responsibility of laboratories to independently validate the application and proper use of any product(s) and/or protocol(s). We reserve the right to make any changes, additions, and/or deletions to our product offerings at any time without notice. The antibody grids were constructed based on our internal investigations with scores based on the internal investigations of Cell Marque™ Tissue Diagnostics with scores based on the percentage of positivity represented as follows: "-" for 0-40%, "-/+" for 40-50%, "+/-" for 50-60%, "+" for 60-100%, and blank for no available data. The products in this reference guide are intended for multiple uses (IVD, RUO, ASR).

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