Cytokeratin 7


IMMUNOGEN: OTN 11 ovarian carcinoma cell line.

REACTIVITY ACCORDING TO MANUFACTURER:
- It reacts with the 54 kDa cytokeratin intermediate filament protein indicated by immunoblotting of cytokeratin enriched cytoskeletal preparations isolated from human OTN 11 ovarian carcinoma cells and other cell lines. The cytokeratin has been identified as cytokeratin 7 according to the classification of Moll et al. Cytokeratin 7 is a basic cytokeratin and is found in most glandular epithelia and in transitional epithelia.
- Normal cells: This antibody reacts with a large number of epithelia including many ductal and glandular epithelia. It does not react with stratified squamous epithelium but it is reactive with transitional epithelium of the urinary tract. Hepatocytes are negative while bile duct epithelium is positive. Epithelium in the lung and breast are positive while colon and prostate epithelial cells are negative. This antibody does not recognize other intermediate filaments.
- Tumor cells: This antibody reacts with many benign and malignant epithelial lesions. Keratin 7 is expressed in specific subtypes of adenocarcinomas from ovary, breast and lung whereas carcinomas from the gastrointestinal tract are found to remain negative. Transitional cell carcinomas do express keratin 7, while prostate cancer is generally negative.
- There is no reaction with squamous cell carcinomas and can thus be regarded as a rather specific marker for adenocarcinoma and transitional cell carcinoma. It has been applied in cytological preparation to distinguish ovarian carcinoma from colonic carcinoma.

STAINING PROCEDURE (according to manufacturer):
- Paraffin-embedded tissue sections: Enzymatic digestion with trypsin or pronase is necessary before staining. Heat-based antigen retrieval improves the staining pattern. LSAB, APAAP, etc can be used.
- Dilution: 1/25-1/50 with LSAB methods on paraffin sections.
  Frozen sections fixed on acetone: 1/25-1/50.

WORKING DILUTION: 1/80. Pretreatment with proteinase K

METHOD: LSAB 2-PO. 30 min., RT.

CELLS/TISSUES STAINED (canine tissues unless specified): Skin: Only simple epithelium (sweat glands). Epidermis and sebaceous and hair follicle epithelium are negative.
REFERENCES:


PDF File

IMAGES