

DM056P

Monoclonal Antibody to Cytokeratin 13 (+ KRT10) - Purified

Alternate names:

CK-13, CK13, K13, KRT-13, KRT13, Keratin type I cytoskeletal 13, Keratin-13

Quantity:

0.1 mg

Concentration:

1.0 mg/ml

Background:

Cytokeratins are a subfamily of intermediate filament proteins and are characterized by a remarkable biochemical diversity, represented in human epithelial tissues by at least 20 different polypeptides. They range in molecular weight between 40 kDa and 68 kDa and isoelectric pH between 4.9 - 7.8. The individual human cytokeratins are numbered 1 to 20.

The various epithelia in the human body usually express cytokeratins which are not only characteristic of the type of epithelium, but also related to the degree of maturation or differentiation within an epithelium. Cytokeratin subtype expression patterns are used to an increasing extent in the distinction of different types of epithelial malignancies. The cytokeratin antibodies are not only of assistance in the differential diagnosis of tumors using immunohistochemistry on tissue sections, but are also a useful tool in cytopathology and flow cytometric assays.

Uniprot ID:

[P13646](#)

NCBI:

[NP_002265](#)

GeneID:

[3860](#)

Host / Isotype:

Mouse / IgG2a

Recommended Isotype

AM03096PU-N

Controls:

Clone:

DE-K13

Immunogen:

Cytoskeletal preparation extracted from Human ectocervical epithelium.

Format:

State: Liquid purified IgG fraction

Buffer System: PBS

Preservatives: 0.09% Sodium Azide

Applications:

Immunoblotting

Immunocytochemistry.

Immunofluorescence.

Immunohistochemistry on Frozen Sections and Paraffin-Embedded tissues.

Flow Cytometry.

Recommended Dilutions: 1/100-1/200 for Flow Cytometry, and for

Immunohistochemistry with avidin-biotinylated horseradish peroxidase complex (ABC) as detection reagent, and 1/100-1/1000 for Immunoblotting applications.

For staining on Paraffin-embedded tissues pretreatment with 0,1% pepsin in 0.1N HCl for 30 min at room temperature is required.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:	<i>DE-K13</i> reacts with Cytokeratin 10 and 13 in fixed cells and on frozen tissues, but exclusively with cytokeratin 13 in Formalin-Fixed, Paraffin Embedded tissues. Cytokeratin 10 is present in keratinizing stratified epithelia and in differentiated areas of highly differentiated squamous cell carcinomas, while Cytokeratin 13 is present in noncornified squamous epithelia, except cornea, and transitional epithelial regions, with the exception of basal cell layers of some stratified epithelia, as well as carcinomas derived from these tissues.
Species Reactivity:	Tested: Human, Feline, Zebrafish, Canine.
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freeze-thaw cycles. Shelf life: One year from despatch.
General Readings:	<ol style="list-style-type: none"> 1. Ivanyi D, Minke JM, Hageman C, Groeneveld E, van Doornewaard G. Patterns of expression of feline cytokeratins in healthy epithelia and mammary carcinoma cells. <i>Am J Vet Res.</i> 1992 Mar;53(3):304-14. PubMed PMID: 1375818. 2. Ivanyi D, Minke JM, Hageman C, Groeneveld E, van Doornewaard G, Misdorp W. Cytokeratins as markers of initial stages of squamous metaplasia in feline mammary carcinomas. <i>Am J Vet Res.</i> 1993 Jul;54(7):1095-102. PubMed PMID: 7690208. 3. van Bommel PF, Kenemans P, Helmerhorst TJ, Gallee MP, Ivanyi D. Expression of cytokeratin 10, 13, and involucrin as prognostic factors in low stage squamous cell carcinoma of the uterine cervix. <i>Cancer.</i> 1994 Oct 15;74(8):2314-20. PubMed PMID: 7522949.
Pictures:	Immunofluorescence staining of a 7 days old Zebrafish embryo.

