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## BM6006P Monoclonal Antibody to Cytokeratin 18 - Purified

Alternate names: CK18, CYK18, Cell proliferation-inducing gene 46 protein, Cytokeratin-18, K18, KRT18,

Keratin 18, Keratin type I cytoskeletal 18, Keratin-18

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: P05783

NCBI: NP 000215.1

GenelD: <u>3875</u>

Host / Isotype: Mouse / IgG1

Recommended Isotype

**Controls:** 

SM10P (for use in human samples), AM03095PU-N

Clone: RCK106

Immunogen: Cytokeratins from the Human bladder carcinoma cell line T24.

**Format:** State: Liquid purified IgG fraction

Buffer System: PBS

Preservatives: 0.09% Sodium Azide

Applications: Immunocytochemistry.

Immunohistochemistry on Frozen Sections. Immunohistochemistry on Paraffin Sections.

Immunoblotting. 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.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.



## BM6006P: Monoclonal Antibody to Cytokeratin 18 - Purified

Specificity: RCK106 reacts exclusively with Cytokeratin 18 in glandular epithelial cells of the

digestive, respiratory, and urogenital tracts, endocrine and exocrine cells and

 $mesothelial\ cells, as\ well\ as\ adenocarcinomas\ originating\ from\ them.$ 

Reacts with Human exclusively.

**Species Reactivity:** 

Tested: Human.

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:** 

- 1. Ramaekers F, Huysmans A, Schaart G, Moesker O, Vooijs P. Tissue distribution of keratin 7 as monitored by a monoclonal antibody. Exp Cell Res. 1987 May;170(1):235-49. PubMed PMID: 2436934.
- 2. Raats JM, Pieper FR, Vree Egberts WT, Verrijp KN, Ramaekers FC, Bloemendal H. Assembly of amino-terminally deleted desmin in vimentin-free cells. J Cell Biol. 1990 Nov;111(5 Pt 1):1971-85. PubMed PMID: 1699950.
- 3. Smedts F, Ramaekers F, Robben H, Pruszczynski M, van Muijen G, Lane B, et al. Changing patterns of keratin expression during progression of cervical intraepithelial neoplasia. Am J Pathol. 1990 Mar;136(3):657-68. PubMed PMID: 1690513.
- 4. Ramaekers F, van Niekerk C, Poels L, Schaafsma E, Huijsmans A, Robben H, et al. Use of monoclonal antibodies to keratin 7 in the differential diagnosis of adenocarcinomas. Am J Pathol. 1990 Mar;136(3):641-55. PubMed PMID: 1690512.
- 5. Schaafsma HE, Ramaekers FC, van Muijen GN, Lane EB, Leigh IM, Robben H, et al. Distribution of cytokeratin polypeptides in human transitional cell carcinomas, with special emphasis on changing expression patterns during tumor progression. Am J Pathol. 1990 Feb;136(2):329-43. PubMed PMID: 1689541.
- 6. Ivanyi D, Groeneveld E, Van Doornewaard G, Mooi WJ, Hageman PC. Keratin subtypes in carcinomas of the uterine cervix: implications for histogenesis and differential diagnosis. Cancer Res. 1990 Aug 15;50(16):5143-52. PubMed PMID: 1696167.
- 7. Smedts, F., Ramaekers, F., Troyanovsky, S., Pruszczynski, M., Link, M., Lane, B., Leigh, I., Schijf, C., and Vooijs, P. (1992). Keratin expression in cervical cancer, Am J Pathol 141, 497-511.
- 8. Bauwens LJ, De Groot JC, Ramaekers FC, Veldman JE, Huizing EH. Expression of intermediate filament proteins in the adult human vestibular labyrinth. Ann Otol Rhinol Laryngol. 1992 Jun;101(6):479-86. PubMed PMID: 1376975.
- 9. Bonfrer JM, Groeneveld EM, Korse CM, van Dalen A, Oomen LC, Ivanyi D. Monoclonal antibody M3 used in tissue polypeptide-specific antigen assay for the quantification of tissue polypeptide antigen recognizes keratin 18. Tumour Biol. 1994;15(4):210-22. PubMed PMID: 7524130.

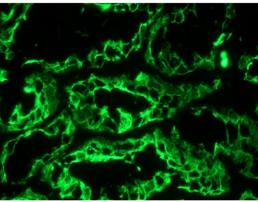


Pictures:

Immunohistochemistry on Paraffin Section of Human colon



Immunohistochemistry on Frozen Section of Human kidney



Immunohistochemistry on Frozen Section of Human small intestine

