

BM6007P**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
GeneID:	3875
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10P (for use in human samples), AM03095PU-N
Clone:	DE-K18
Immunogen:	Cytoskeletal preparation extracted from the human vulvar squamous carcinoma cell line A431.
Format:	State: Liquid purified IgG fraction. Buffer System: PBS with 0.09% sodium azide as preservative.
Applications:	Suitable for Immunocytochemistry, Immunoblotting (1/100-1/1000), Flow cytometry (1/100-1/200) and Immunohistochemistry on frozen (with avidin-biotinylated horseradish peroxidase complex (ABC) as detection reagent) and paraffin embedded tissues (pretreatment with 0,1% pepsin in 0.1 N HCl 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:	This antibody reacts exclusively with cytokeratin 18 which is present 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. Species: Human, Canine, Feline, Zebrafish. Other species not tested.
Storage:	Store the antibody (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. 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. Vos JH, van den Ingh TS, de Neijs M, van Mil FN, Ivanyi D, Ramaekers FC. Immunohistochemistry with keratin monoclonal antibodies in canine tissues: urogenital tract, respiratory tract, (neuro-)endocrine tissues, choroid plexus and spinal cord. <i>Zentralbl Veterinarmed A.</i> 1992 Dec;39(10):721-40. PubMed PMID: 1283472. 3. Vos JH, van den Ingh TS, Ramaekers FC, Molenbeek RF, de Neijs M, van Mil FN, et al. The expression of keratins, vimentin, neurofilament proteins, smooth muscle actin, neuron-specific enolase, and synaptophysin in tumors of the specific glands in the canine anal region. <i>Vet Pathol.</i> 1993 Jul;30(4):352-61. PubMed PMID: 8212457. 4. 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. <i>Tumour Biol.</i> 1994;15(4):210-22. PubMed PMID: 7524130.