

DM127P**Monoclonal Antibody to Cytokeratin 17 - Purified**

Alternate names:	CK17, Cytokeratin-17, K17, KRT17, Keratin 17, Keratin type I cytoskeletal 17, Keratin-17
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:	Q04695
NCBI:	NP_000413.1
GeneID:	3872
Host / Isotype:	Mouse / IgG2b
Recommended Isotype Controls:	SM12P, AM03110PU-N
Clone:	Ks17.E3
Immunogen:	A cytoskeletal preparation from Rat colon.
Format:	State: Liquid purified IgG fraction Buffer System: PBS Preservatives: 0.09% Sodium Azide
Applications:	Immunoblotting: 1/100-1/1000. Immunocytochemistry. Immunohistochemistry on Frozen and Paraffin Embedded tissues: 1/25-1/200 for immunohistochemistry with avidin-biotinylated horseradish peroxidase complex (ABC) as detection reagent. Flow Cytometry: 1/25-1/200. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Molecular Weight:	46 kDa
Specificity:	Clone E3 reacts with Cytokeratin 17 in basal layers of pseudo-stratified and transitional epithelia.
Species Reactivity:	Tested: Human, Rat.

- Storage:** Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
- Product Citations:** **Originator or purchased from resellers:**
1. Poschmann G, Sitek B, Sipos B, Ulrich A, Wiese S, Stephan C, et al. Identification of proteomic differences between squamous cell carcinoma of the lung and bronchial epithelium. *Mol Cell Proteomics*. 2009 May;8(5):1105-16. doi: 10.1074/mcp.M800422-MCP200. Epub 2009 Jan 27. PubMed PMID: 19176476.
- General Readings:**
1. Guelstein VI, Tchypysheva TA, Ermilova VD, Litvinova LV, Troyanovsky SM, Bannikov GA. Monoclonal antibody mapping of keratins 8 and 17 and of vimentin in normal human mammary gland, benign tumors, dysplasias and breast cancer. *Int J Cancer*. 1988 Aug 15;42(2):147-53. PubMed PMID: 2456993.
 2. Troyanovsky SM, Guelstein VI, Tchypysheva TA, Krutovskikh VA, Bannikov GA. Patterns of expression of keratin 17 in human epithelia: dependency on cell position. *J Cell Sci*. 1989 Jul;93 (Pt 3):419-26. PubMed PMID: 2481679.
 3. Smedts, F., Ramaekers, F., Troyanovsky, S., Pruszczynski, M., Link, M., Lane, B., Leigh, I., and Vooijs, P. (1990). Keratin expression in cervical cancer, *Am J Pathol* 141, 497-511.
 4. Wetzels RH, Kuijpers HJ, Lane EB, Leigh IM, Troyanovsky SM, Holland R, et al. Basal cell-specific and hyperproliferation-related keratins in human breast cancer. *Am J Pathol*. 1991 Mar;138(3):751-63. PubMed PMID: 1705754.
 5. Wetzels RH, Schaafsma HE, Leigh IM, Lane EB, Troyanovsky SM, Wagenaar SS, et al. Laminin and type VII collagen distribution in different types of human lung carcinoma: correlation with expression of keratins 14, 16, 17 and 18. *Histopathology*. 1992 Apr;20(4):295-303. PubMed PMID: 1374358.
 6. Smedts F, Ramaekers F, Troyanovsky S, Pruszczynski M, Robben H, Lane B, et al. Basal-cell keratins in cervical reserve cells and a comparison to their expression in cervical intraepithelial neoplasia. *Am J Pathol*. 1992 Mar;140(3):601-12. PubMed PMID: 1372156.
 7. Smedts F, Ramaekers F, Link M, Lauerova L, Troyanovsky S, Schijf C, et al. Detection of keratin subtypes in routinely processed cervical tissue: implications for tumour classification and the study of cervix cancer aetiology. *Virchows Arch*. 1994;425(2):145-55. PubMed PMID: 7524976.
 8. Litvinov SV, van Driel W, van Rhijn CM, Bakker HA, van Krieken H, Fleuren GJ, et al. Expression of Ep-CAM in cervical squamous epithelia correlates with an increased proliferation and the disappearance of markers for terminal differentiation. *Am J Pathol*. 1996 Mar;148(3):865-75. PubMed PMID: 8774141.
 9. Moll, R., et al. (1995). Differenzierungsmarker bei gynäkologischen Tumoren: Methodische und diagnostische Aspekte. In: Aktuelle Aspekte der Tumorummunologie in der Gynäkologie. W Zuckschwerdt Verlag.
 10. Demirkesen C, Hoede N, Moll R. Epithelial markers and differentiation in adnexal neoplasms of the skin: an immunohistochemical study including individual cytokeratins. *J Cutan Pathol*. 1995 Dec;22(6):518-35. PubMed PMID: 8835171.
 11. de Jong EM, van Vlijmen IM, van Erp PE, Ramaekers FC, Troyanovski SM, van de Kerkhof PC. Keratin 17: a useful marker in anti-psoriatic therapies. *Arch Dermatol Res*. 1991;283(7):480-2. PubMed PMID: 1724898.