

# Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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# Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

# Zuschläge

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- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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#### Product datasheet

# Mouse anti Cytokeratin 8 / Keratin K8

mordicmubio.com/products/mouse-anti-cytokeratin-8-keratin-k8/MUB0318P

Catalog number: MUB0318P

Clone	M20
Isotype	lgG1
Product Type	Primary Antibodies
Units	0.1 mg
Host	Mouse
Species Reactivity	Human
	Rabbit Rat

## Background

Cytokeratins are a subfamily of intermediate filament proteins and are characterized by a remarkable biochemical diversity, represented in 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 Cytokeratin polypeptides 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.

#### Source

M20 is a Mouse monoclonal IgG1 antibody derived by fusion of murine myeloma cells with spleen cells from a Mouse immunized with Keratin isolated from the Human breast carcinoma cell line MCF-7.

#### **Product**

Each vial contains 100 ul 1 mg/ml purified monoclonal antibody in PBS containing 0.09% sodium azide.

Formulation: Each vial contains 100 ul 1 mg/ml purified monoclonal antibody in PBS containing 0.09% sodium azide.

### **Specificity**

M20 reacts with glandular epithelial cells (endocrine and exocrine) as well as mesothelial cells and epithelia of the digestive, respiRatory and urogenital tract. Also most adenocarcinomas derived from these cells are positive. The M20 epitope has been mapped to amino acids 353-367 on the alpha helical rod domain of Cytokeratin 8 (see reference 10).

## **Applications**

M20 is suitable for immunoblotting, immunocytochemistry, immunohistochemistry on frozen and paraffin-embedded tissues and flow cytometry. Optimal antibody dilution should be determined by titration; recommended range is 1:100 – 1:200 for immunohistochemistry with avidin-biotinylated Horseradish peroxidase complex (ABC) as detection reagent, and 1:100 – 1:1000 for immunoblotting applications.

#### Storage

The antibody is shipped at ambient temperature and may be stored at +4°C. For prolonged storage prepare appropriate aliquots and store at or below -20°C. Prior to use, an aliquot is thawed slowly in the dark at ambient temperature, spun down again and used to prepare working dilutions by adding sterile phosphate buffered saline (PBS, pH 7.2). Repeated thawing and freezing should be avoided. Working dilutions should be stored at +4°C, not refrozen, and preferably used the same day. If a slight precipitation occurs upon storage, this should be removed by centrifugation. It will not affect the performance or the concentration of the product.

### Caution

This product is intended FOR RESEARCH USE ONLY, and FOR TESTS IN VITRO, not for use in diagnostic or therapeutic procedures involving humans or animals. It may contain hazardous ingredients. Please refer to the Safety Data Sheets (SDS) for additional information and proper handling procedures. Dispose product remainders according to local regulations. This datasheet is as accurate as reasonably achievable, but Exalpha Biologicals accepts no liability for any inaccuracies or omissions in this information.

#### References

1. Van Muijen, G. N., Ruiter, D. J., and Warnaar, S. O. (1987). Coexpression of intermediate filament polypeptides in Human fetal and adult tissues. Lab Invest 57, 359-69. 2. Van Muijen, G. N., Warnaar, S. O., and Ponec, M. (1987). Differentiation-related changes of Cytokeratin expression in cultured Keratinocytes and in fetal, newborn, and adult epidermis. Exp Cell Res 171, 331-45. 3. Schaafsma, H. E., Ramaekers, F. C., van Muijen, G. N., Ooms, E. C., and Ruiter, D. J. (1989). Distribution of Cytokeratin polypeptides in epithelia of the adult Human urinary tract. Histochemistry 91, 151-9, 4. Smedts, F., Ramaekers, F., Robben, H., Pruszczynski, M., van Muijen, G., Lane, B., Leigh, I., and Vooiis, P. (1990). Changing patterns of Keratin expression during progression of cervical intraepithelial neoplasia. Am J Pathol 136, 657-68. 5. Ramaekers, F., van Niekerk, C., Poels, L., Schaafsma, E., Huijsmans, A., Robben, H., Schaart, G., and Vooijs, P. (1990). Use of monoclonal antibodies to Keratin 7 in the differential diagnosis of adenocarcinomas. Am J Pathol 136, 641-55. 6. Schaafsma, H. E., Ramaekers, F. C., van Muijen, G. N., Lane, E. B., Leigh, I. M., Robben, H., Huijsmans, A., Ooms, E. C., and Ruiter, D. J. (1990). Distribution of Cytokeratin polypeptides in Human transitional cell carcinomas, with special emphasis on changing expression patterns during tumor progression. Am J Pathol 136, 329-43. 7. Ivanyi, D., Groeneveld, E., Van Doornewaard, G., Mooi, W. J., and Hageman, P. C. (1990). Keratin subtypes in carcinomas of the uterine cervix: impliCations for histogenesis and differential diagnosis. Cancer Res 50, 5143-52. 8. Wetzels, R. H., Kuijpers, H. J., Lane, E. B., Leigh, I. M., Troyanovsky, S. M., Holland, R., van Haelst, U. J., and Ramaekers, F. C. (1991). Basal cell-specific and hyperprolifeRation-related Keratins in Human breast cancer. Am J Pathol 138, 751-63. 9. Ku, N. O., Gish, R., Wright, T. L., and Omary, M. B. (2001). Keratin 8 mutations in patients with cryptogenic liver disease. N Engl J Med 344, 1580-7. 10. Waseem, A., Karsten, U., Leigh, I.M., Purkis, P., Waseem, H. and Lane, B. (2004). Conformational changes in the rod domain of Human Keratin 8 following heterotypic association with Keratin 18 and its impliCation for filament stability. Biochemistry 43, 1283-95.

## Protein Reference(s)

Database Name: UniProt

Accession Number: P05787

**Safety Datasheet(s) for this product:** 

NM Sodium Azide