Technical Data Sheet

Purified Mouse Anti-Cytokeratin 5/8

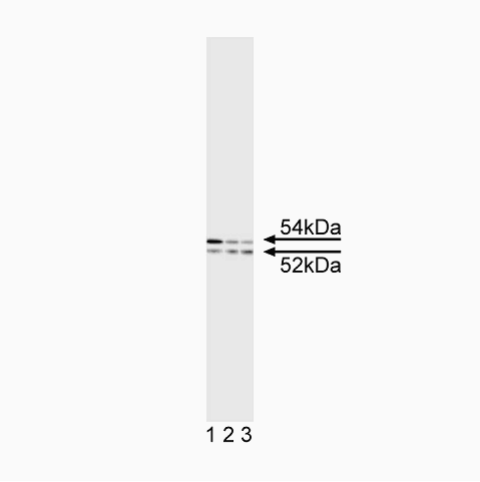
Product Information

Material Number:	**550505**
Size:	50 µg
Concentration:	0.5 mg/ml
Clone:	RCK102
Immunogen:	Human lung cancer cell line (MR21)
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Reported: Mouse, Rat, Hamster, Rabbit, Dog, Pig
Target MW:	54/52 kDa
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

Intermediate filaments (IF) are a subset of cytoskeletal proteins which function to give overall structural integrity to the plasma membrane as well as organize cells into specific tissues. IF proteins can be divided into six major types based upon the similarity in sequence. Type I and II IF proteins are designated keratins based upon whether they are acidic (I) or basic (II) and are characterized by their remarkable biochemical diversity. A subgroup of keratins, designated cytokeratins, are represented in epithelial tissues by at least 20 different polypeptides, designated 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 5 has a molecular weight of approximately 58 kDa (NCBI Accession number P13647) while cytokeratin 8 is approximately 53 kDa (NCBI Accession number P05787). We observe cytokeratin 5 to migrate at approximately 54 kDa and cytokeratin 8 at approximately 52 kDa.

The antibody recognizes cytokeratins 5 and 8 from human, mouse, rat, hamster, rabbit, canine, and swine. The antibody stains all epithelial tissue; it does not stain non-epithelial tissue. The human lung cancer cell line (MR21) was used as the immunogen.



Western blot analysis of Cytokeratin 5/8. *Lysate from HeLa cells was probed with anti-cytokeratin 5/8 (clone RCK102, Cat. No. 550505) at concentrations of 1 (lane 1), 0.5 (lane 2), and 0.25 µg/ml (lane 3). Cytokeratin 5/8 is identified as a doublet of ~54/52 kDa.*

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at 4°C.

Application Notes

Application

Western blot	Routinely Tested
Immunohistochemistry	Reported

Recommended Assay Procedure:

Applications include western blot analysis (0.5 - 1 µg/ml). HeLa cell lysate (Cat. No. 611449) is recommended as a positive control. Additional reported applications include immunohistochemistry on methanol fixed tissue, but this is application is not tested at BD Pharmingen.

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit **bdbiosciences.com/how_to_order/**

Suggested Companion Products

Catalog Number	Name	Size	Clone
611449	HeLa Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

Broers JL, Carney DN, Klein Rot M, et al. Intermediate filament proteins in classic and variant types of small cell lung carcinoma cell lines: a biochemical and immunochemical analysis using a panel of monoclonal and polyclonal antibodies. *J Cell Sci.* 1986; 83:37-60.(Immunogen)

Broers JL, Ramaekers FC, Rot MK, et al. Cytokeratins in different types of human lung cancer as monitored by chain-specific monoclonal antibodies. *Cancer Res.* 1988; 48(11):3221-3229.(Biology)

Lodish H, Berk A, Zipursky SL, et al. *Molecular Cell Biology*. New York: WH Freeman; 2000:795-847.(Biology)

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; 170(1):235-249.(Clone-specific: Western blot)

Smedts F, Ramaekers F, Robben H, et al. Changing patterns of keratin expression during progression of cervical intraepithelial neoplasia. *Am J Pathol.* 1990; 136(3):657-668.(Clone-specific: Immunohistochemistry)