

Novocastra™ Liquid Mouse Monoclonal Antibody Cytokeratin 5

Product Code: NCL-L-CK5

Intended Use	FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES.
Specificity	Human cytokeratin 5 intermediate filament protein
Clone	XM26
Ig Class	IgG1, kappa
Antigen Used for Immunizations	Prokaryotic recombinant fusion protein corresponding to a 103 amino acid portion of the C-terminal region of the human cytokeratin 5 molecule.
Hybridoma Partner	Mouse myeloma (p3-NS1-Ag4-1).
Preparation	Liquid tissue culture supernatant containing sodium azide. Volume as indicated on vial label.
Effective on Frozen Tissue	Yes. Acetone fixation recommended.
Effective on Paraffin Wax Embedded Tissue	Yes
Recommendations on Use	Immunohistochemistry on paraffin sections. Heat Induced Epitope Retrieval (HIER): Please follow the instructions for use in Novocastra Epitope Retrieval Solution pH 6. Suggested dilution: 1:100 for 30 minutes at 25 °C. This is provided as a guide and users should determine their own optimal working dilutions. Visualization: Please follow the instructions for use in the Novolink™ Polymer Detection Systems. For further product information or support, contact your local distributor or regional office of Leica Biosystems, or alternatively, visit the Leica Biosystems' Web site, www.LeicaBiosystems.com <u>The performance of this antibody should be validated when utilized with other manual staining systems or automated platforms.</u> Western Blotting: Typical working dilution 1:500–1:1000.
Positive Controls	Immunohistochemistry: Prostate. Western Blotting: A431 cell line.
Staining Pattern	Cytoplasmic.
Storage and Stability	Store liquid antibody at 2-8 °C. Under these conditions, there is no significant loss in product performance up to the expiry date indicated on the vial label. Prepare working dilutions on the day of use.
Warnings and Precautions	This reagent has been prepared from the supernatant of cell culture. As it is a biological product, reasonable care should be taken when handling it. This reagent contains sodium azide. A Material Safety Data Sheet is available upon request or available from www.LeicaBiosystems.com





B I O S Y S T E M S

General Overview

Cytokeratins are a large family of cytoskeletal proteins found in epithelial cells. They are co-ordinately synthesized in pairs so that at least one member of each family is expressed in each epithelial cell. Cytokeratins assemble into obligatory heteropolymers composed of type I (acidic) and type II (basic) polypeptides to form higher order tetramers and protofilaments. Basal cells of human epidermis express acidic keratin 14 and basic cytokeratin 5. Cytokeratin 5 is a 58 kD protein that is closely related to cytokeratin 6. They share similar tissue distribution and are reported to be found in various proportions in many non-keratinizing stratified squamous epithelia eg tongue mucosa, as well as in basal epithelia of trachea, basal cells of epidermis, hair follicles, sebaceous and sweat glands of skin, luminal cells of the mammary gland, basal cells of prostate, urothelium, vagina and endocervical mucosa.

General References

- Bhargava R, Beriwal S, McManus K et al. *The American Journal of Clinical Pathology* . 2008; 130:724-730.
- Laakso M, Tanner M, Nilsson J et al. *Clinical Cancer Research*. 2006; 12(14):4185-4191
- Miettinen M and Sarlomo-Rikala M. *The American Journal of Surgical Pathology*. 2003; 27(2):150-158.
- Zhang RR, Man Y-G, Vang R, et al. *Breast Cancer Research*. 2003; 5:R151-R156.