

Rev. Date: Jan. 5, 2015

**Revision: 1** 

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# Cytokeratin, Pan (Epithelial Marker); Clone AE-1 & AE-3 (Concentrate)

Availability/Contents:	Item # Volume RA0382-C.5 0.5 ml
Description:	nau302-0.3 0.3 mi
Species:	Mouse
Immunogen:	Human epidermal keratin
Clone:	AE-1 & AE-3
Isotype:	lgG1, kappa (AE-1); lgG1, kappa (AE-3)
Entrez Gene ID:	3848 (CK1); 3850 (CK3); 3851 (CK4); 3852 (CK5); 3853 (CK6A); 3856 (CK8); 3858 (CK10); 3861 (CK14); 3866 (CK15); 3868 (CK16); 3880 (CK19)
Hu Chromosome Loc.:	12q13.13 (CK1); 12q13.13 (CK3); 12q13.13 (CK4); 12q13.13 (CK5); 12q13.13 (CK6); 12q13.13 (CK8); 17q21.2 (CK10); 17q21.2 (CK14); 17q21.2 (CK15); 17q21.2 (CK16); 17q21.2 (CK19)
Synonyms:	K1B; KRT1B; Keratin, type II cytoskeletal 1b; K77; CK-1B; Keratin 1B; Keratin-77; Cytokeratin- 1B; Type-II Keratin Kb39
Mol. Weight of Antigen:	40-67kDa
Format:	200μg/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Specificity:	This antibody cocktail recognizes acidic (Type I or LMW) and basic (Type II or HMW) cytokeratins, which include 67kDa (CK1); 64kDa (CK3); 59kDa (CK4); 58kDa (CK5); 56kDa (CK6); 52kDa (CK8); 56.5kDa (CK10); 50kDa (CK14); 50kDa (CK15); 48kDa (CK16); 40kDa (CK19). This antibody stains cytokeratins present in normal and abnormal human tissues and has shown high sensitivity in the recognition of epithelial cells and carcinomas.
Background:	Twenty human keratins are resolved with two-dimensional gel electrophoresis into acidic (pl <5.7) and basic (pl >6.0) subfamilies. Many studies have shown the usefulness of keratins as markers in cancer research and tumor diagnosis. AE-1 & AE-3 is a broad spectrum anti pancytokeratin antibody cocktail which differentiates epithelial tumors from non-epithelial tumors, e.g. squamous vs. adenocarcinoma of the lung, liver carcinoma, breast cancer, and esophageal cancer. It has been used to characterize the source of various neoplasms and study the distribution of cytokeratin-containing cells in epithelia during normal development and during the development of epithelial neoplasms.
Species Reactivity:	Human, Monkey, Cow, Dog, Rabbit, Mouse, Rat, Chicken. Others not known.
Positive Control:	Skin, Adeno- or Squamous carcinomas.
Cellular Localization:	Cytoplasmic
Titer/ Working Dilution:	Immunohistochemistry (Frozen and Formalin-fixed): 0.5-1 μg/ml
	Flow Cytometry: 0.5-1 µg/million cells
	Immunofluorescence: 1-2 μg/ml
· · · · · · · · · · · · · · · · · · ·	Western Blotting: 0.5-1 µg/ml
Microbiological State:	This product is not sterile.

Storage: 2° C



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### CE

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Doc: IFU-Template2-8rev2



## Instructions For Use RA0382-C.5-IFU-RUO

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**Uses/Limitations:** 

Not to be taken internally. For Research Use Only. This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy. Do not use if reagent becomes cloudy. Do not use past expiration date. Non-Sterile.



Formalin-fixed, paraffin-embedded colon carcinoma stained with Cytokeratin, Pan; Clone AE-1 & AE-3.

#### Procedure:

- Tissue Section Pretreatment (Required): Staining of formalin fixed, paraffin embedded tissue sections is 1. significantly enhanced by pretreatment with Citrate Plus (ScyTek catalog# CPL500).
- 2. Primary Antibody Incubation Time: We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
- Visualization: For maximum staining intensity we recommend the "UltraTek HRP Anti-Polyvalent Lab Pack" 3. (ScyTek catalog# UHP125, see IFU for instructions) combined with the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" (ScyTek catalog# ACV500, see IFU for instructions).

Precautions: Contains Sodium Azide as a preservative (0.09% w/v). Do not pipette by mouth. Avoid contact of reagents and specimens with skin and mucous membranes. Avoid microbial contamination of reagents or increased nonspecific staining may occur. This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

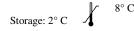
#### **References:**

Woodock-Mitchell J et. al. Journal of Cell Biology 1982;95:580-8. 1.

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2. Tseng SCG et. al. Cell 1982; 30361.

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