

Pan Cytokeratin Antibody Cocktail [clone AE1 + AE3] (V2330)

Catalog No.	Formulation	Size
V2330-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2330-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2330SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2330IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ug

Citations (12)

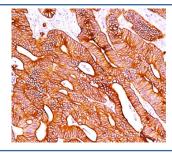
Bulk quote request

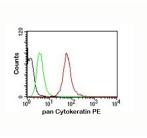
Species Reactivity	Human, Mouse, Rat
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	AE1 + AE3
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	3848 (K1); 3850 (K3); 3851 (K4); 3852 (K5); 3853 (K6A); 3856 (K8);3858 (K10); 3861 (K14); 3866 (K15); 3868 (K16); 3880 (K19)
Localization	Cytoplasmic
Applications	Flow Cytometry: 0.5-1ug/10e6 cells Immunofluorescence: 1-2ug/ml Western Blot: 0.5-1ug/ml for 2 hours at RT Immunohistochemistry (FFPE): 0.5-1ug/ml for 30 min at RT (1) Prediluted IHC Only Format: incubate for 30 min at RT (2)
Limitations	This pan Cytokeratin antibody is available for research use only.

IHC staining of colon carcinoma with pan Cytokeratin antibody cocktail AE1 + AE3.



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FACS testing of MCF-7 cells: Black=cells alone; Green=isotype control; Red= pan Cytokeratin antibody PE conjugate

Description

Pan Cytokeratin antibody clones AE1 + AE3 are monoclonal antibodies that together recognize a broad spectrum of cytokeratins, including both acidic type I and basic type II keratins. This wide coverage allows detection of cytokeratins expressed in simple, stratified, and glandular epithelia, making this antibody combination one of the most widely used epithelial markers in research and diagnostic pathology. NSJ Bioreagents provides Pan Cytokeratin antibody clones AE1 + AE3 for studies that require comprehensive detection of epithelial cells and epithelial-derived tumors.

Pan Cytokeratin antibody clones AE1 + AE3 produce robust cytoplasmic staining across multiple epithelial tissues, including skin, gastrointestinal tract, lung, breast, and prostate. In pathology, they are a standard tool for confirming epithelial origin in tumors. This is particularly important in distinguishing carcinomas from non-epithelial neoplasms such as sarcomas, lymphomas, or melanomas. Their broad reactivity ensures that a wide range of carcinomas, regardless of differentiation state, can be reliably identified.

In oncology, Pan Cytokeratin antibody clones AE1 + AE3 are applied to study epithelial tumor progression and metastasis. Cytokeratin detection is used to identify micrometastatic disease in sentinel lymph nodes or bone marrow, where even small clusters of epithelial cells can be visualized using this antibody combination. This application highlights the sensitivity of the clones for detecting epithelial lineage in challenging contexts.

In developmental and cell biology, Pan Cytokeratin antibody clones AE1 + AE3 have been used to monitor epithelial differentiation and polarity. Cytokeratins are central components of the cytoskeleton, providing mechanical strength and supporting specialized epithelial functions. The broad specificity of clones AE1 + AE3 makes them suitable for studies that track epithelial lineage commitment in stem cell and organoid models.

Validated across tissue-based and cell-based assays, Pan Cytokeratin antibody clones AE1 + AE3 consistently deliver strong, reproducible signals. They have been extensively cited in research covering epithelial development, cancer, and regenerative biology. Alternate names include epithelial cytokeratin antibody, broad-spectrum cytokeratin antibody, and

carcinoma marker antibody.

This pan keratin antibody cocktail recognizes acidic (Type I or LMW) and basic (Type II or HMW) cytokeratins, which include CK1, CK3-6, CK8, CK10, CK14-16, and CK19.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the pan Cytokeratin antibody AE1 + AE3 to be titered up or down for optimal performance.

- 1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes.
- 2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Human epidermal keratin was used as the immunogen for this pan Cytokeratin antibody.

Storage

Store the pan Cytokeratin antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

References (2)