

Pan Cytokeratin Antibody FITC / Multiplex Epithelial Marker [clone AE-1/AE-3] (V2330FITC)

Catalog No.	Formulation	Size
V2330FITC-100T	500 ul at 0.1 mg/ml with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 Tests

[Bulk quote request](#)

Availability	1-3 business days
Species Reactivity	Human
Format	FITC Conjugate
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	AE-1/AE-3
Purity	Protein G affinity chromatography
Localization	Cytoplasmic
Applications	Flow Cytometry : 5ul per test per one 10 ⁶ cells in 0.1ml or 5ul per 100ul of whole blood Immunofluorescence : 1:50-1:100
Limitations	This Pan Cytokeratin Antibody FITC / Multiplex Epithelial Marker is available for research use only.



Description

Cytokeratins are intermediate filament proteins that form an extensive cytoskeletal network within epithelial cells, where they maintain cellular integrity, support mechanical stability, and preserve cell morphology. These proteins are divided into type I acidic and type II basic keratins, which assemble into filamentous structures throughout the cytoplasm. Because cytokeratin expression is a defining feature of epithelial cells, detection of these proteins provides a reliable

approach for identifying epithelial lineage in flow cytometry applications.

Pan Cytokeratin Antibody FITC / Multiplex Epithelial Marker (clone AE1/AE3) is a fluorescein-conjugated antibody designed for intracellular detection of cytokeratin proteins in flow cytometry workflows. The AE1/AE3 antibody cocktail provides broad recognition of type I and type II cytokeratins, enabling comprehensive epithelial detection, while the FITC fluorophore offers a stable and widely compatible signal for multi-parameter flow cytometry experiments. Pan cytokeratin antibody AE1/AE3 FITC, also referred to as cytokeratin FITC conjugate or CK pan FITC antibody, is particularly well suited for panel-based experimental designs requiring flexibility and fluorophore compatibility.

In flow cytometry, FITC provides a well-characterized fluorescence signal with moderate intensity that integrates efficiently into multi-color panels. While less bright than PE, FITC produces a clean and consistent signal with manageable spectral overlap, making it a practical choice for experiments involving multiple fluorophores. This balance between signal intensity and spectral compatibility allows FITC to be used effectively in multiplex assays where careful panel design is required to minimize compensation and signal spillover.

Following fixation and permeabilization, AE1/AE3 FITC staining produces a clear intracellular signal corresponding to cytokeratin filament networks within epithelial cells. This allows epithelial populations to be readily distinguished from cytokeratin-negative cells using standard gating strategies. The reproducibility of FITC signal across experiments supports consistent identification and quantification of epithelial cells in diverse sample types.

Pan cytokeratin FITC conjugates are widely used in studies involving epithelial cell identification, tumor cell analysis, and mixed population profiling, particularly in workflows where multiple markers are analyzed simultaneously. The compatibility of FITC with common laser and detector configurations ensures broad usability across flow cytometry platforms, making it a reliable choice for routine applications.

The AE1/AE3 cocktail ensures inclusive detection of cytokeratin proteins across epithelial cell types, providing comprehensive epithelial coverage without bias toward specific keratin isoforms. This makes the FITC-conjugated format an effective general-purpose epithelial marker in flow cytometry panels designed to assess cell composition and lineage.

As a directly conjugated antibody, AE1/AE3 FITC eliminates the need for secondary antibodies, reducing background and simplifying experimental protocols. This improves workflow efficiency and enhances reproducibility across experiments, particularly in multi-sample or high-throughput settings.

Pan Cytokeratin Antibody FITC therefore provides a flexible and reliable tool for epithelial cell detection in flow cytometry, supporting multiplex panel design, consistent signal performance, and accurate identification of epithelial populations in complex biological samples.

This antibody is part of our [Pan Cytokeratin Antibody collection](#), which enables broad epithelial detection across normal and cancer tissues.

Application Notes

Optimal dilution of the Pan Cytokeratin Antibody FITC / Multiplex Epithelial Marker should be determined by the researcher.

Immunogen

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

Storage

Store the Pan Cytokeratin antibody at 2-8°C, protected from light.

Alternate Names

Pan cytokeratin FITC antibody, AE1 AE3 FITC conjugate antibody, cytokeratin FITC FACS antibody, epithelial marker FITC antibody, CK pan FITC antibody