

# Pan Cytokeratin Monoclonal Antibody (AE1/AE3), eFluor™ 570, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Dog, Human, Mouse, Non-human primate, Rabbit, Rhesus monkey
Published Species	Dog, Human, Mouse
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	AE1/AE3
Conjugate	eFluor™ 570
Excitation/Emission Max	556/569 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_11218704

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (IHC)	-	9 Publications
Immunohistochemistry (Paraffin) (IHC (P))	Assay-Dependent	-
Immunohistochemistry (Frozen) (IHC (F))	Assay-Dependent	1 Publication
Immunocytochemistry (ICC/IF)	1 µg/mL	10 Publications
Flow Cytometry (Flow)	-	1 Publication
Miscellaneous PubMed (Misc)	-	1 Publication

## Product Specific Information

**Description:** The monoclonal antibodies AE1 and AE3 recognize many of the acidic and basic cytokeratin family members. Cytokeratins are intermediate filament proteins comprising one component of the cytoskeleton. There are two large families of cytokeratins, acidic and basic, but all contain the same basic domains (i.e. an alpha-helical core with an N- and C-terminal domain). The proteins are expressed in epithelial cells, but are developmentally regulated. Many tumors also express these proteins and their expression can help identify the origin of a neoplasm.

The AE3 monoclonal antibody recognizes the 65 to 67 triplet, 64, 59, 58, 56, 54 and 52kDa proteins also known as cytokeratin 1, 2, 3, 4, 5, 6, 7, and 8 while the AE1 antibody recognizes 56.5, 54', 50, 50', 48, and 40 kDa proteins (also known as CK10, 14, 15, 16 and 19). These antibodies can be used on a wide array of tissue samples from mouse, human, rat, primates (cynomolgus and rhesus), dog, cat, rabbit, and chicken.

**Applications Reported:** This AE1/AE3 antibody has been reported for use in immunohistochemical staining,

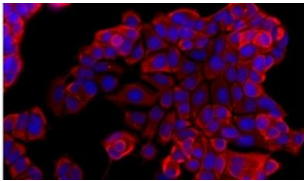
immunocytochemistry, immunohistochemical staining of frozen tissue sections, and immunohistochemical staining of formalin-fixed paraffin embedded tissue sections.

**Applications Tested:** This AE1/AE3 antibody has been tested by immunocytochemistry on methanol-fixed MCF7 cells and can be used at less than or equal to 1 µg/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

**Filter Recommendation:** When using this eFluor® 570 antibody conjugate, we recommend a filter that will capture the 570 emission wavelength (for example, Excitation 545/25, 565LP, Emission 605/70). A standard Alexa Fluor® 555 or TRITC filter is acceptable.

Excitation: 555 nm; Emission: 570 nm

**Product Images For Pan Cytokeratin Monoclonal Antibody (AE1/AE3), eFluor™ 570, eBioscience™**



**Pan Cytokeratin Antibody (41-9003-82) in ICC/IF**  
Immunocytochemistry of fixed and permeabilized MCF7 cells using 1 µg/mL of Anti-Pan Cytokeratin (AE1/AE3) eFluor® 570. Nuclei are stained with DAPI.

**[View more figures on thermofisher.com](https://www.thermofisher.com)**

Western Blot (1)

<p>Cancers</p> <p><b>Cysteine-Rich Angiogenic Inducer 61: Pro-Survival Function and Role as a Biomarker for Disseminating Breast Cancer Cells.</b></p> <p>"Published figure using Pan Cytokeratin monoclonal antibody (Product # 41-9003-82) in Western Blot"</p> <p>Authors: Bartkowiak K,Heidrich I,Kwiatkowski M,Gorges TM,Andreas A,Geffken M,Verpoort K,Müller V,Schlüter H,Pantel K</p>	<p>Year</p> <p>2021</p>
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Immunohistochemistry (9)

<p>NPJ breast cancer</p> <p><b>Neither epithelial nor mesenchymal circulating tumor cells isolated from breast cancer patients are tumorigenic in NOD-<i>scid</i> <i>Il2rg</i> mice.</b></p> <p>"Published figure using Pan Cytokeratin monoclonal antibody (Product # 41-9003-82) in Immunofluorescence"</p> <p>Authors: Donnenberg VS,Huber A,Basse P,Rubin JP,Donnenberg AD</p>	<p>Year</p> <p>2022</p>
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<p>International journal of molecular sciences</p> <p><b>CD74 and CD44 Expression on CTCs in Cancer Patients with Brain Metastasis.</b></p> <p>"Published figure using Pan Cytokeratin monoclonal antibody (Product # 41-9003-82) in Immunohistochemistry"</p> <p>Authors: Loreth D,Schuette M,Zinke J,Mohme M,Piffko A,Schneegans S,Stadler J,Janning M,Loges S,Joose SA,Lamszus K,Westphal M,Müller V,Glatzel M,Matschke J,Gebhardt C,Schneider SW,Belczacka I,Volkmer B,Greinert R,Yaspo ML,Harter PN,Pantel K,Wikman H</p>	<p>Year</p> <p>2021</p>
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Immunohistochemistry (Frozen) (1)

<p>Frontiers in molecular neuroscience</p> <p><b>TALPID3/KIAA0586 Regulates Multiple Aspects of Neuromuscular Patterning During Gastrointestinal Development in Animal Models and Human.</b></p> <p>"Published figure using Pan Cytokeratin monoclonal antibody (Product # 41-9003-82) in Immunohistochemistry (Frozen)"</p> <p>Authors: Delalande JM,Nagy N,McCann CJ,Natarajan D,Cooper JE,Carreno G,Dora D,Campbell A,Laurent N,Kemos P,Thomas S,Alby C,Attié-Bitach T,Lyonnet S,Logan MP,Goldstein AM,Davey MG,Hofstra RMW,Thapar N,Burns AJ</p>	<p>Year</p> <p>2022</p>
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More applications with references on thermofisher.com

- ICC/IF (10)
- Flow (1)
- Misc (1)

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