

Anti-Pan-Cytokeratin (AE1/AE3) Alexa Fluor® 488

Catalog Number: 53-9003 Also Known As:keratin, basic, acidic RUO: For Research Use Only. Not for use in diagnostic procedures.



Immunofluorescent microscopy of fixed and permeabilized MCF-7 cells using 1 ug/ml of Mouse IgG1 kappa Isotype Control Alexa Fluor® 488 (cat. 53-4714) (left) or Anti-Pan Cytokeratin (AE1/AE3) Alexa Fluor® 488 (right).

Product Information

Contents: Anti-Pan-Cytokeratin (AE1/AE3) Alexa Fluor® 488Formulation: aqueous buffer, 0.09% sodium azide, may contain
carrier protein/stabilizerClone: AE1/AE3
Concentration: 0.5 mg/mL
Host/Isotype: Mouse IgG1Formulation: aqueous buffer, 0.09% sodium azide, may contain
carrier protein/stabilizerImage: Description of the sensitive material of the

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 α -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, and 52kD proteins also known as cytokeratin 1, 2, 3, 4, 5, 6, 7) while the AE1 antibody recognizes 56.5, 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 immunofluorescent microscopy.

Applications Tested

This AE1/AE3 antibody has been tested by immunofluorescent staining of formaldehyde- fixed and permeabilized MCF-7 cells. This can be used at less than or equal to 1 μ g/ml. It is recommended that the antibody be titrated for optimal performance in the assay of interest.

References

Sato T, Maeda H, Suzuki A, Shibuya H, Sakata A, Shirai W. Endometrial stromal sarcoma with smooth muscle and glandular differentiation of the feline uterus. Vet Pathol. 2007 May;44(3):379-82. (AE1/AE3, IHC, feline)

Chen SS, Revoltella RP, Papini S, Michelini M, Fitzgerald W, Zimmerberg J, Margolis L. Multilineage differentiation of rhesus monkey embryonic stem cells in three-dimensional culture systems. Stem Cells. 2003;21(3):281-95.(AE1/AE3, IHC, rhesus)

Woodcock-Mitchell J, Eichner R, Nelson WG, Sun TT. Immunolocalization of keratin polypeptides in human epidermis using monoclonal antibodies. J Cell Biol. 1982 Nov;95(2 Pt 1):580-8. (AE1/AE3, WB, IHC, PubMed)

Tseng SC, Jarvinen MJ, Nelson WG, Huang JW, Woodcock-Mitchell J, Sun TT. Correlation of specific keratins with different types of epithelial differentiation: monoclonal antibody studies. Cell. 1982 Sep;30(2):361-72.

Related Products

14-9000 Anti-Basic Cytokeratin Purified (AE3)14-9001 Anti-Acidic Cytokeratin Purified (AE1)53-4714 Mouse IgG1 K Isotype Control Alexa Fluor® 488 (P3.6.2.8.1)

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