

**AM10028FC-N****Monoclonal Antibody to pan Cytokeratin - FITC**

<b>Alternate names:</b>	Cytokeratin pan-reactive, pan Keratin
<b>Quantity:</b>	0.2 mg
<b>Concentration:</b>	0.2 mg/ml
<b>Background:</b>	Cytokeratins are intermediate filament keratins found in the intracytoplasmic cytoskeleton of epithelial tissue. There are two types of Cytokeratins: the low weight, acidic type I cytokeratins and the high weight, basic or neutral type II. Cytokeratins are usually found in pairs comprising a type I Cytokeratin and a type II cytokeratin. The high molecular weight cytokeratins, which are the basic or neutral cytokeratins, comprise subtypes CK1(67), CK2(65.5), CK3(64), CK4(59), CK5(58), CK6(56), CK7(54), CK8(52.5) and CK9. The low molecular weight cytokeratins, which are the acidic cytokeratins, comprise subtypes CK10 (56.5), CK12 (56), CK13 (53), CK14 (50), CK16 (48), CK17 (46), CK18 (45), CK19 (48) and CK20 (46).
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Recommended Isotype Controls:</b>	SM10F (for use in human samples), SM20F (for use in rat samples), AM03095PU-N
<b>Clone:</b>	AE1/AE3
<b>Immunogen:</b>	Human epidermal keratin. <b>Remarks: <i>Molecular Weight of Antigen:</i></b> CK1 (67), CK2 (65.5), CK3 (64), CK4 (59), CK5 (58) CK6 (56) CK8 (52.5). + CK1 (67), CK2 (65.5), CK3 (64), CK4 (59), CK5 (58) CK6 (56) CK8 (52.5).
<b>Format:</b>	<b>State:</b> Liquid purified IgG fraction <b>Purification:</b> Protein A Chromatography <b>Buffer System:</b> PBS, pH 7.4 <b>Preservatives:</b> 0.05% Sodium Azide <b>Stabilizers:</b> 1% BSA <b>Label:</b> FITC
<b>Applications:</b>	<b>Immunofluorescence:</b> 10-20 µg /ml (1/10-1/20), incubate for 2 hours in the dark at RT or it can also be incubated overnight at 4°C. <b>Flow Cytometry:</b> 0.2-1.0 µg/0.1 ml (1/200-1/1,000) (Not tested in our lab). Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	<i>AE 1/AE3</i> represents an excellent marker for distinguishing carcinomas from non-epithelial tumors; reacts with all epithelium-derived tumors and their neoplasms. Decorates the majority of type I and type II keratins (formerly also designated cytokeratins). This antibody stains cytokeratins present in normal and abnormal human tissues and has shown high sensitivity in the recognition of epithelial cells and carcinomas. This antibody <i>AE 1/AE 3</i> recognizes Low Molecular Weight Cytokeratins (CK 10 (56.5), CK14 (50), CK15 (50), CK16 (48) and CK19 (40) of the acidic family and CK1 (67), CK2 (65.5), CK3 (64), CK4 (59), CK5 (58) CK6 (56) and CK8 (52.5).

**Cellular Localization:** Cytoplasmic.

**Species Reactivity:** Tested: Human, Monkey, Bovine, Porcine, Rat, Mouse, Rabbit and Chicken.

**Storage:** Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.  
Avoid repeated freezing and thawing.  
Shelf life: One year from despatch.

**General Readings:** Battifora, H., Sheibani, K., Tubbs, R.R., Kopinski, M.I. and Sun, T.-T.: Anti-keratin antibodies in tumor diagnosis: Distinction between seminoma and embryonal carcinoma. *Cancer* 54, 843-848 (1984)

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expression in epidermal diseases: A 48 kD and a 56 kD keratin as molecular markers for hyperproliferating keratinocytes. *J. Cell Biol.* 98, 1397-1406 (1984)

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