

**AM33272PU-T****Monoclonal Antibody to basic Cytokeratin - Purified**

<b>Alternate names:</b>	Cytokeratin type II, HMW Cytokeratins, Keratin type I
<b>Quantity:</b>	20 µg
<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>	SM10P (for use in human samples), SM20P (for use in rat samples), AM03095PU-N
<b>Clone:</b>	SPM116
<b>Immunogen:</b>	Human epidermal keratin.
<b>Format:</b>	<b>State:</b> Liquid purified IgG fraction from Bioreactor concentrate <b>Purification:</b> Protein A/G Chromatography <b>Buffer System:</b> 10mM PBS <b>Preservatives:</b> 0.05% Sodium Azide <b>Stabilizers:</b> 0.05% BSA
<b>Applications:</b>	<b>ELISA:</b> Use BSA free Antibody for Coating. <b>Western Blot:</b> 0.5-1 µg/ml. <b>Flow Cytometry:</b> 0.5-1 µg/10 <sup>6</sup> cells. <b>Immunofluorescence:</b> 1-2 µg/ml. <b>Immunohistochemistry on Frozen and Formalin-Fixed, Paraffin-Embedded Sections:</b> 0.5-1 µg/ml for 30 minutes at RT. 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. <b>Positive Control:</b> Skin, Adenocarcinomas. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Molecular Weight:</b>	67kDa (CK1); 64kDa (CK3); 59kDa (CK4); 58kDa (CK5); 56kDa (CK6); 52kDa (CK8)
<b>Specificity:</b>	This Monoclonal antibody (Clone SPM116) recognizes basic (Type II or HMW) cytokeratins, which include 67kDa (CK1); 64kDa (CK3); 59kDa (CK4); 58kDa (CK5); 56kDa (CK6); 52kDa (CK8). Twenty human keratins are resolved with two-dimensional gel electrophoresis into acidic (pI < 5.7) and basic (pI > 6.0) subfamilies. The acidic keratins have molecular weights (MW) of 56.5, 55, 51, 50, 50', 48, 46, 45, and 40kDa. This SPM116 antibody recognizes the 65-67, 64, 59, 58, 56, and 52kDa keratins of

basic subfamily. Many studies have shown the usefulness of keratins as markers in cancer research and tumor diagnosis.

**Cellular Localization:** Cytoplasmic.

**Species Reactivity:**

**Tested:** Human, Monkey, Cow, Dog, Rabbit, Mouse, Rat, Chicken.

**Storage:**

Store undiluted at 2-8°C.

**DO NOT FREEZE!**

Shelf life: one year from despatch.

**General Readings:**

1. 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. PubMed PMID: 6183275.
2. Tseng SCG et. al. Cell 1982; 30361.

**Pictures:**

Formalin-Fixed, Paraffin-Embedded skin stained with basic Cytokeratin Antibody Cat.-No AM33272PU (Clone SPM116).

