

Monoclonal Antibody to pan Cytokeratin - PE

Alternate names:	Cytokeratin pan-reactive, pan Keratin
Catalog No.:	AM33270RP-N
Quantity:	100 Tests
Concentration:	0.1 mg/ml (0.5 ml)
Background:	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 cyto keratins and the high weight, basic or neutral type II. Cytokeratins are usually found in pairs comprising a type I Cytokeratin and a type II cyto keratin. The high molecular weight cyto keratins, which are the basic or neutral cyto keratins, 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 cyto keratins, which are the acidic cyto keratins, comprise subtypes CK10 (56.5), CK12 (56), CK13 (53), CK14 (50), CK16 (48), CK17 (46), CK18 (45), CK19 (48) and CK20 (46).
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10R (for use in human samples), SM20R (for use in rat samples)
Clone:	SPM115 + SPM116
Immunogen:	Human epidermal keratin.
Format:	State: Liquid purified IgG fraction from Bioreactor Concentrate Purification: Protein A/G Chromatography Buffer System: 10mM PBS Preservatives: 0.05% Sodium Azide Stabilizers: 0.05% BSA Label: PE
Applications:	Flow Cytometry: Use antibody at 5 µl/test/10 ⁶ cells. Immunofluorescence: 1/50-1/100. Positive Control: Skin, Adeno- or Squamous carcinomas. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Molecular Weight:	90-110kDa
Specificity:	Twenty Human keratins are resolved with two-dimensional gel electrophoresis into acidic (pI < 5.7) and basic (pI > 6.0) subfamilies. This antibody cocktail recognizes acidic (Type I or LMW) and basic (Type II or HMW) cyto keratins, which include CK1, CK3, CK4, CK5, CK6, CK8, CK10, CK14, CK15, CK16, and CK19. Many studies have shown the usefulness of keratins as markers in cancer research and tumor diagnosis. This Monoclonal Antibody is a broad spectrum anti pan-Cytokeratin antibody cocktail,

which differentiates epithelial tumors from non-epithelial tumors e.g. squamous vs. adenocarcinoma of the lung, liver carcinoma, breast cancer, and esophageal cancer. It has been used to characterize the source of various neoplasms and to study the distribution of cytokeratin containing cells in epithelia during normal development and during the development of epithelial neoplasms.

This antibody stains Cytokeratins present in normal and abnormal human tissues and has shown high sensitivity in the recognition of epithelial cells and carcinomas.

Cellular Localization: Cytoplasmic.

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

Storage: Store undiluted at 2-8°C.

DO NOT FREEZE!

This products is photosensitive and should be protected from light.

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.
3. Frolova, E., Baryshnikov A.Y., Frenkel M. et al., Monoclonal antibody ICO-115 to human CD34 antigen. Herald of the Cancer Research Center of RAMS. Suppl, p. 10-12, 1994.
4. Baryshnikov A, and Tonevitsky A, Monoclonal antibodies in laboratory and clinic. Thesis p212, 1997.
5. Kishimoto et al., Leucocyte typing Gariand Publishing. 1997.
6. Felshow DM et al. Blood 97:3768-3775 (2001).
7. Sato T et al. Blood 94:2548-2554 (1999).