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AM33289PU-S Monoclonal Antibody to basic Cytokeratin - Purified

Quantity: 0.1 mg

Concentration: 0.2 mg/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 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).

Host / Isotype: Mouse / IgG1

Recommended Isotype Controls: SM10P (for use in human samples), SM20P (for use in rat samples), AM03095PU-N

Clone: SPM591

Immunogen: Solubilized Keratin extracted from Human stratum corneum.

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

Applications:
Western Blot: 0.5-1.0 µg/ml.
Flow Cytometry: 0.5-1.0 µg/10^6 cells.
Immunofluorescence: 0.5-1.0 µg/ml.
Immunohistochemistry on Frozen and Formalin-Fixed, Paraffin-Embedded Sections: 0.5-1.0 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.
Positive Control: PC12 cells, Skin, Prostate carcinoma.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Molecular Weight: 67kDa (CK1); 58kDa (CK5); 56.5kDa (CK10); 50kDa (CK14)

Specificity: This antibody recognizes Keratin 1, 5, 10, and 14 in the Moll catalog (MW 68kDa, 58kDa, 56.5kDa, and 50kDa), respectively.
This antibody promises to be a specific marker useful in differential identification of squamous carcinomas from adenocarcinomas and differential diagnosis of benign and malignant tumors of prostatic gland. In normal epithelia, it stains stratified epithelia, myoepithelial cells and basal cells in the prostate gland and bronchi. This MAb shows no reactivity with hepatocytes, pancreatic acinar cells, proximal renal tubules, or endometrial glands; there is no reactivity with cells derived from simple

epithelia. Mesenchymal tumors, lymphomas, melanomas, neural tumors, and neuroendocrine tumors are negative with this antibody. It stains myoepithelial cells and has been shown to be useful in distinguishing prostate adenocarcinoma from benign prostate. This antibody has also been useful in separating benign from malignant intraductal breast proliferations.
Cellular Localization: Cytoplasmic.

Species Reactivity: **Tested:** Human, Mouse, Rat.

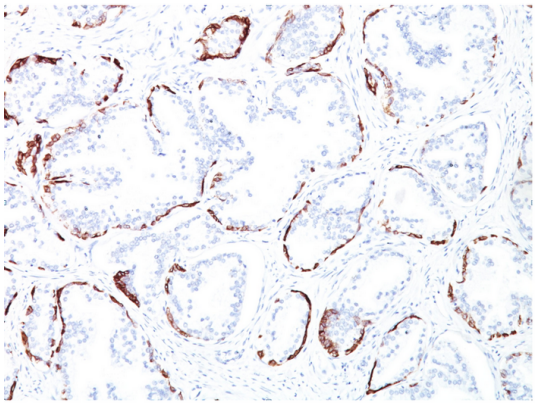
Storage: Store undiluted at 2-8°C.
DO NOT FREEZE!
Shelf life: one year from despatch.

General Readings:

1. Moinfar F, Man YG, Lininger RA, Bodian C, Tavassoli FA. Use of keratin 35betaE12 as an adjunct in the diagnosis of mammary intraepithelial neoplasia-ductal type--benign and malignant intraductal proliferations. Am J Surg Pathol. 1999 Sep;23(9):1048-58. PubMed PMID: 10478664.
2. Varma M, Linden MD, Amin MB. Effect of formalin fixation and epitope retrieval techniques on antibody 34betaE12 immunostaining of prostatic tissues. Mod Pathol. 1999 May;12(5):472-8. PubMed PMID: 10349984.

Pictures:

Formalin-Fixed, Paraffin-Embedded Human prostate tissue (10X) stained with HMW Keratin antibody Cat.-No. AM33289PU (Clone SPM591).



Formalin-Fixed, Paraffin-Embedded Human prostate tissue (20X) stained with HMW Keratin antibody Cat.-No. AM33289PU (Clone SPM591).