OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850
UNITED STATES
Phone: +1-888-267-4436
Fax: +1-301-340-8606
techsupport@origene.com

OriGene Technologies GmbH
Schillerstr. 5
32052 Herford
GERMANY
Phone: +49-5221-34606-0
Fax: +49-5221-34606-11
info-de@origene.com

AM50198PU-S Monoclonal Antibody to Cytokeratin 4+5+6+8+10+13+18 - Purified

Alternate names: Cytokeratin pan-reactive, Keratin type I cytoskeletal 1, Keratin type I cytoskeletal 10, Keratin type I cytoskeletal 18, Keratin type II cytoskeletal 4, Keratin type II cytoskeletal 5, Keratin type II cytoskeletal 6, Keratin type II cytoskeletal 8, pan Keratin

Quantity: 0.1 mg

Concentration: 0.2 mg/ml

Background: Cytokeratins are a subfamily of intermediate filaments and characterized by remarkable biochemical diversity. Cytokeratins are represented in epithelial tissues by at least 20 different polypeptides, molecular weight between 40 kDa and 68 kDa. The individual cytokeratin polypeptides are designated 1 to 20 and divided into the type I (acidic cytokeratins 9-20) and type II (basic to neutral cytokeratins 1-8) families.

Host / Isotype: Mouse / IgG1

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

Clone: SPM583

Immunogen: Keratin-enriched preparation from cultured Human A431.
Genename: KRT4; KRT5; KRT6; KRT8; KRT10; KRT13; KRT18

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:
Flow Cytometry: 0.5-1 µg/million cells.
Immunofluorescence: 0.5-1 µg/ml.
Western Blotting: 0.5-1 µg/ml.
Immunohistochemistry on Frozen and Formalin-Fixed Paraffin Sections: 0.5-1 µ/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: A431 cells, Skin, Colon carcinoma.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Molecular Weight: Multiple

Specificity:

This Monoclonal Antibody recognizes Cytokeratin 4, 5, 6, 8, 10, 13, and 18. This is a broad-spectrum antibody which has been reported to differentiate epithelial tumors from non-epithelial tumors. Many studies have shown the usefulness of keratins as markers in cancer research and tumor diagnosis.
Cellular Localization: Cytoplasmic.
Species: Human, Cow, Rat, Mouse, Guinea pig, Frog, Goat, Marmoset and Pig.
Other species not tested.

Storage:

Store undiluted at 2-8°C.
Shelf life: one year from despatch.

General Readings:

1. Bártek J, Vojt□sek B, Stasková Z, Bártková J, Kerekés Z, Rejthar A, et al. A series of 14 new monoclonal antibodies to keratins: characterization and value in diagnostic histopathology. J Pathol. 1991 Jul;164(3):215-24. PubMed PMID: 1716305.
2. Lane EB, Alexander CM. Use of keratin antibodies in tumor diagnosis. Semin Cancer Biol. 1990 Jun;1(3):165-79. PubMed PMID: 1715788.
3. Bártková J, Bártek J, Lukás Z, Vojt□sek B, Stasková Z, Bursová H, et al. Effects of tissue fixation conditions and protease pretreatment on immunohistochemical performance of a large series of new anti-keratin monoclonal antibodies: value in oncopathology. Neoplasma. 1991;38(4):439-46. PubMed PMID: 1717857.
4. Kasper M. Heterogeneity in the immunolocalization of cytokeratin specific monoclonal antibodies in the rat eye: evaluation of unusual epithelial tissue entities. Histochemistry. 1991;95(6):613-20. PubMed PMID: 1713203.

Pictures:

Formalin-Paraffin Colon (10X) stained with Multi Keratin Antibody Cat.-No AM50198PU (Clone SPM583).