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

BM5043 Monoclonal Antibody to Cytokeratin 6 - Purified

Alternate names: Cytokeratin 6, Cytokeratin6A, Cytokeratin6D, K6, KRT-6, KRT6A, KRT6B, KRT6C, KRT6D, KRT6E, KRTL1, Keratin type II cytoskeletal 6A

Quantity: 50 µg

Background: Keratins 6 and 16 are expressed in keratinocytes, which are undergoing rapid turnover in the suprabasal region (also known as hyperproliferation related keratins). Keratin 6 is found in hair follicles, neck squamous cell carcinomas, suprabasal cells of a variety of internal stratified epithelia, in epidermis, in both normal and hyperproliferative situations. Epidermal injury results in activation of keratinocytes which express CK6 and CK16. CK6 is strongly expressed in about 75% of head and neck squamous cell carcinomas. Expression of CK6 is particularly associated with differentiation.
There are at least six isoforms of human type II keratin 6 (K6), K6A being the most abundant representing about 77% of all forms found in epithelia.

Uniprot ID: P02538

NCBI: NP_005545.1

GeneID: 3853

Host / Isotype: Mouse / IgG1

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

Clone: Ks6.KA12

Immunogen: Keratin K6 of Human callus cytoskeletal preparation.

Format:
State: Lyophilized purified Ig fraction
Purification: Affinity Chromatography on Protein A
Buffer System: PBS, pH 7.4
Preservatives: 0.09% Sodium Azide
Stabilizers: 0.5% BSA
Reconstitution: Restore in 1 ml distilled water.

Applications:
Immunoblotting (Western blot).
Immunohistochemistry on Frozen and Paraffin Embedded Sections after formalin fixation (microwave treatment improves performance). After reconstitution, dilute the antibody further 1/10 with PBS for Immunohistochemical applications.
Incubation Time: 1h at RT, extended with Paraffin.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

The antibody is suitable for discrimination of keratinizing and non-keratinizing squamous cell carcinoma versus e. g. poorly differentiated adenocarcinoma.
Clone Ks6.KA12 represents an excellent marker for non-keratinized squamous epithelia and proliferating cells of epidermis (e.g. within psoriatic lesions).
Reacts with a Mr 56000 polypeptide (keratin K6, formerly also designated cytokeratin 6) of squamous epithelia.
Tested Reactivities on Cultured Cell Lines: A-431, Detroit 562 and SCC-12.
Species: Human and Mouse.
Other species not tested.

Storage:

Store lyophilized at 2-8°C for 6 months or at -20°C long term.
After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

Product Citations:

Purchased from Acris:
1. Poschmann G, Sitek B, Sipos B, Ulrich A, Wiese S, Stephan C, et al. Identification of proteomic differences between squamous cell carcinoma of the lung and bronchial epithelium. Mol Cell Proteomics. 2009 May;8(5):1105-16. doi: 10.1074/mcp.M800422-MCP200. Epub 2009 Jan 27. PubMed PMID: 19176476.

General Readings:

1. Wetzels RH, Kuijpers HJ, Lane EB, Leigh IM, Troyanovsky SM, Holland R, et al. Basal cell-specific and hyperproliferation-related keratins in human breast cancer. Am J Pathol. 1991 Mar;138(3):751-63. PubMed PMID: 1705754.
2. Demirkesen C, Hoede N, Moll R. Epithelial markers and differentiation in adnexal neoplasms of the skin: an immunohistochemical study including individual cytokeratins. J Cutan Pathol. 1995 Dec;22(6):518-35. PubMed PMID: 8835171.
3. Moll R. et al.: Differenzierungsmarker bei gynäkologischen Tumoren: Methodische und diagnostische Aspekte. In: Aktuelle Aspekte der Tumorimmunologie in der Gynäkologie. W. Zuckschwerdt Verlag (1995).
4. Herrmann T, van der Hoeven F, Grone HJ, Stewart AF, Langbein L, Kaiser I, et al. Mice with targeted disruption of the fatty acid transport protein 4 (Fatp 4, Slc27a4) gene show features of lethal restrictive dermopathy. J Cell Biol. 2003 Jun 23;161(6):1105-15. PubMed PMID: 12821645.