



3050 Spruce Street
 Saint Louis, Missouri 63103 USA
 Telephone 800-325-5832 • (314) 771-5765
 Fax (314) 286-7828
 email: techserv@sia.com
 sigma-aldrich.com

Product Information

MONOCLONAL ANTI-CYTOKERATIN CK5

Clone CK5

Mouse Ascites Fluid

Product No. **C 7785**

Product Description

Monoclonal Anti-Cytokeratin CK5 (mouse IgG1 isotype) is derived from the hybridoma produced by the fusion of mouse myeloma cells and splenocytes from an immunized mouse. Keratin from a human bladder carcinoma cell line was used as the immunogen. The isotype is determined using Sigma ImmunoType™ Kit (Product Code No. ISO-1) and by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents (Product Code ISO-2). The product is provided as ascites fluid containing 0.1% sodium azide (see MSDS) as a preservative.

Monoclonal Anti-Cytokeratin CK5 is specific for the cytokeratin peptide 18 as determined by indirect immunofluorescence. The antibody reacts specifically with a wide variety of simple epithelia (e.g., intestine, respiratory and urinary systems, liver, and glandular epithelia). It does not react with stratified squamous epithelia (e.g. esophagus or epidermis) or with non-epithelial cells. When used in indirect immunofluorescent labeling of various human tissue staining is as follows:

Epithelia

Liver	hepatocytes	+
	bile ducts	+
Intestine	small intestine	+
	large bowel	+
Respiratory system	bronchial tree	+
	alveoli	+
Urinary system	kidney tubules	+
	bladder urothel	+
Uterus	cervical glands	+
Apocrine glands from axilla		+
Eccrine sweat glands (duct)		+
Mammary gland (duct)		+
Submandibular gland (duct)		+
Parotid gland (duct)		+
Placenta	cytotrophoblast	+
	amnion	!

Stratified Squamous Epithelia

Vagina	!
Esophagus	!
Tongue	!
Sebaceous glands	!
Hair follicles	!
Epidermis	!
Epidermis basal layer	"

Non-Epithelial Tissues

Muscle, smooth or striated	!
Connective tissue stroma	!
Nerve processes	!

Monoclonal Anti-Cytokeratin CK5 may be used for immunohistochemical staining of formalin-fixed, paraffin-embedded or frozen tissue sections by means of indirect immunofluorescence or immunoperoxidase techniques.

Epithelial cells and their derivatives characteristically contain intermediate filaments (IFs) composed of about 20 related polypeptides with molecular weights between 40,000-69,000. Each epithelial tissue has a specific and stable pattern of expression of some of these cytokeratin subunits. Epithelium derived tumors maintain the expression of the cytokeratins found in the normal tissue of origin. Therefore, carcinomas can be identified and classified by immunocytochemical staining with antibodies that react specifically with cytokeratins.

Precautions and Disclaimer

Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling practices

Product Profile

A working dilution of at least 1:50 was determined by indirect immunofluorescent labeling of frozen human epithelia (e.g. intestinal, respiratory or urinary simple epithelia) tissue sections.

In order to obtain best results, it is recommended that each individual user determine their optimum working dilution by titration assay.

Storage

For continuous use, store at 2-8 °C for up to one month. For extended storage, solution may be frozen in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify by centrifugation before use.

PCS/KMR 03/02

Sigma brand products are sold through Sigma-Aldrich, Inc.

Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see reverse side of the invoice or packing slip.