



## Product Information

**Product No. C-7785**  
**Monoclonal Anti-Cytokeratin CK5**  
 Mouse Ascites Fluid  
 Clone CK5

**Lot** 078F4828

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 by a double diffusion assay using immunoglobulin and subclass specific antisera. The product is provided as ascites fluid containing 0.1% sodium azide (see MSDS)\* as a preservative.

### Specificity

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 nonepithelial 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	-

### Working Dilution

A working dilution of 1:50 was determined by indirect immunofluorescent labeling of formalin fixed paraffin embedded 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.

### Description

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.

## Uses

Monoclonal anti-Cytokeratin CK5 is a homogenous population of antibody molecules that may be used for immunohistochemical staining of formalin fixed paraffin embedded or frozen tissue sections by means of indirect immunofluorescence or immunoperoxidase techniques.

## Storage

For continuous use, store at 0-5°C. 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.

\*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.

Sigma warrants that its products conform to the information contained in this and other Sigma publications. Purchaser must determine suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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