

## Product Information

### MONOCLONAL ANTI-CYTOKERATIN PEPTIDE 18

#### Clone CY-90

Mouse Ascites Fluid

Product No. **C 8541**

#### Product Description

Monoclonal Anti-Cytokeratin Peptide 18 (mouse IgG1 isotype) is derived from the hybridoma produced by the fusion of mouse myeloma cells and splenocytes from an immunized mouse. Human epidermal carcinoma (A-431) and MCF-7 human breast cancer cells were used as the immunogen. The isotype is determined by a double diffusion assay using immunoglobulin and subclass specific antisera.

Monoclonal Anti-Cytokeratin Peptide 18 shows specific reactivity for the cytokeratin peptide 18 by immunoblotting analysis of human cultured cell lines as well as of human tissue extracts. 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 immunofluorescent or immunoperoxidase 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	+
	prostate epithelium	+
Uterus	cervical glands	+
Apocrine glands from axilla		+
Eccrine sweat glands (duct)		+
Mammary gland (duct)		+
Submandibular gland (duct)		+
Parotid gland (duct)		+
Placenta	cytotrophoblast	+

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 Peptide 18 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.

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.

#### Reagents

The product is provided as ascites fluid containing 15 mM sodium azide as a preservative.

#### 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 1:800 was determined by indirect immunofluorescent labeling of formalin fixed paraffin embedded human 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.

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