



3050 Spruce Street  
Saint Louis, Missouri 63103 USA  
Telephone (800) 325-5832 (314) 771-5765  
Fax (314) 286-7828  
email: [techserv@sial.com](mailto:techserv@sial.com)  
[sigma-aldrich.com](http://sigma-aldrich.com)

## Product Information

### MONOCLONAL ANTI-CYTOKERATIN 8.13

#### CLONE K8.13

#### Mouse Ascites Fluid

Product No. **C6909**

#### Product Description

Monoclonal Anti-Cytokeratin 8.13 (mouse IgG2a isotype) is derived from the hybridoma produced by the fusion of mouse myeloma cells and splenocytes from an immunized mouse. Bovine epidermal keratins were used as the immunogen. The isotype is determined using Sigma ImmunoType™ Kit (Product Code ISO-1) and by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents (Product Code ISO-2).

The antibody reacts specifically with a wide variety of epithelial tissues and cultured epithelial cells.<sup>1</sup> Monoclonal Anti-Cytokeratin 8.13 binds to a determinant present in a large number of human cytokeratins, notably polypeptides 10, 11 and 18. In all tissues tested the antibody did not stain cells of non-epithelial origin.

Monoclonal Anti-Cytokeratin 8.13 may be used to aid in the differentiation between tumors of mesenchymal (keratin-negative) and epithelial (keratin-positive) origin.

#### Reagents

The product is provided as ascites fluid with 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 minimum working dilution of 1:20 was determined by indirect labeling of frozen tissue sections.

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

#### Staining of Normal Human Tissue

In the following tissues, epithelial elements were positively stained with Monoclonal Anti-Cytokeratin 8.13 while cells of non-epithelial origin were not stained.

##### Skin

Epidermis (all layers)  
Sweat glands and ducts  
Sebaceous glands

##### Gastrointestinal Tract

Salivary glands (acini and ducts)  
Stratified, non-keratinizing esophageal epithelium and mucous glands  
Surface epithelium of the stomach and gastric glands  
Intestinal epithelium and glands (large and small intestine)  
Rectal epithelium (squamous, non-keratinizing) and glands  
Hepatocytes and bile ducts  
Pancreatic acini and ducts

##### Respiratory

Ciliated columnar epithelium and basal cells of trachea and bronchi  
Serous and mucous glands and ducts  
Alveolar epithelium

##### Urinary

Kidney tubules (partially positive)  
Transitional epithelium of ureter and bladder

##### Genital Tract

Glandular epithelium of prostate  
Glands and surface epithelium of endometrium  
Non-keratinizing, squamous epithelium of exocervix and mucosal cells of endocervix  
Mammary gland ducts and acini

##### Lymphatic

Reticular cells in thymus (all circulating lymphocytes and lymph node cells are negative)

### Staining of Human Tumors

Among the following tumors, those of epithelial origin are positively stained with Monoclonal Anti-Cytokeratin 8.13 while those of mesenchymal origin are unstained. In mixed tumors, epithelial elements are positively stained while mesenchymal elements are not stained.

Location	Tumor Type	Staining
Skin	Basal Cell Carcinoma	Positive
	Nevus	Negative
	Melanoma	Negative
Lung	Squamous Cell	
	Carcinoma	Positive
	Metastatic Melanoma	Negative
	Adenocarcinoma	Positive
	Lymphoma	Positive
	Large Cell Carcinoma	Positive
	Carcinosarcoma:	
	Carcinomatous Cells	Positive
	Sarcomatous Cells	Negative

### Storage and Stability

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

### Reference

1. Gigi, O., et al., EMBO J., **1**, 1429 (1982).

Pcs9/99

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