



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

Product Information

Monoclonal Anti-Cytokeratin Peptide 14

Clone CKB1

Mouse Ascites Fluid

Product No. C 8791

Product Description

Monoclonal Anti-Cytokeratin Peptide 14 (mouse IgM isotype) is derived from the hybridoma produced by the fusion of mouse myeloma cells and splenocytes from an immunized mouse. Human callus 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).

Monoclonal Anti-Cytokeratin Peptide 14 is a homogenous population of antibody molecules that may be used for immunohistochemical staining of methacarn-fixed paraffin-embedded or frozen tissue sections by means of indirect immunofluorescence or immunoperoxidase techniques. Also by immunoblotting, the antibody is specific for the cytokeratin polypeptide 14 using the human cultured cell line A431. The antibody reacts specifically with myoepithelial cells in various organs as well as with the basal layer of certain squamous epithelia. The antibody shows reactivity on human, rat, goat, and sheep tissue preparations. When used in immunofluorescent and immunoperoxidase labeling of various human tissues, the antibody shows staining as follows:

Normal Tissue

Parotid Gland	
acinar cells	—
ductal cells	—
myoepithelial cells	+
Submandibular Gland	
acinar cells	—
ductal cells	—
myoepithelial cells	+

Mammary Gland	
acinar cells	—
ductal cells	—
myoepithelial cells	+
Pancreas	
ductal cells	—
Sweat Glands	
acinar cells	—
ductal cells	—
myoepithelial cells	+
Prostate Gland	
acinar cells	—
ductal cells	—
myoepithelial cells	+
Exocervical Epithelium	
basal cells	+
intermediate and upper cells	—
Laryngeal Epithelium	
basal cells	+
intermediate and upper cells	—
Stomach	
antrum	—
corpus	—
Colon	—
Small Intestine	—
Gall Bladder	—
Liver	
hepatocytes	—
bile ducts	—
Tonsilar Epithelium	
basal cells	+

Tumors	
Pancreas	
ductal adenocarcinoma	—
liver metastasis	—
Stomach	
adenocarcinoma	—
Colon	
rectal adenocarcinoma	—
Villous	
adenoma	—
Hepatocellular	
carcinoma	—
Cholangiocellular	
carcinoma	—

Epithelial cells and their derivatives characteristically contain intermediate filaments (IF) composed of ~20 related polypeptides with molecular weights between 40,000-60,000. 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. Carcinomas can be identified and classified by immunocytochemical staining with antibodies that react specifically with cytokeratins.

Reagent

The antibody is provided as ascites fluid with 0.1% sodium azide as a preservative.

Precautions and Disclaimer

Due to 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.

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.

Product Profile

by indirect immunofluorescence, a minimum working antibody dilution of 1:200 is recommended using methacarn-fixed paraffin-embedded sections of human tissue.

In order to obtain optimum results, it is recommended that each individual user determine working dilutions by titration.

Kaa 07/05

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.