

Product No. C-8791
Lot 046H4823

Monoclonal Anti-Cytokeratin Peptide 14
 Mouse Ascites Fluid
 Clone CKB1

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 ImmunoTypeTM Kit (Sigma Stock No. ISO-1) and by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents (Sigma Stock No. ISO-2). The product is provided as ascites fluid with 0.1% sodium azide (see MSDS)* as a preservative.

Specificity

Monoclonal Anti-Cytokeratin Peptide 14 is specific for the cytokeratin polypeptide 14 by immunoblotting procedures on the human cultured cell line A431. The antibody reacts specifically with myoepithelial cells in different organs as well as with the basal layer of certain squamous epithelia. The product shows reactivity on human, rat, goat and sheep tissue preparations. Monoclonal Anti-Cytokeratin Peptide 14 when used in immunofluorescent and immunoperoxidase labeling of various human tissues 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	-

Working Dilution

A working dilution of 1:200 is determined by indirect immunofluorescent methods on Methacarn-fixed paraffin-embedded sections of human tissue.

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

Description

Epithelial cells and their derivatives characteristically contain intermediate filaments (IF) composed of about 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.

Uses

Monoclonal Anti-Cytokeratin Peptide 14 is a homogeneous 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.

*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 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.

Sigma warrants that its products conform to the information contained in this and other Sigma publications. Purchaser must determine the suitability of the products for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of ~~dated~~ 06/96.