

Peninsula Laboratories, LLC A Member of the Bachem Group

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Monoclonal Antibody to Human Collagen Type IV Marker For The Major Constituent Of Basement Membranes

Monoclonal antibody C IV 22 stains basement membranes in a variety of tissues and organs, including kidney, skin, striated and smooth muscle, spleen, lymph node, lung, placenta, and tendon. It recognizes native, but not denatured collagen type IV but nevertheless reacts clearly with formalin-fixed paraffin-embedded sections. C IV 22 is a useful marker for monitoring destruction of basal membranes as observed in malignant neoplastic diseases.

Product Number:	T-1201
Clone:	C IV 22
Host species, isotype:	Mouse IgG1
Quantity:	100µg
Format:	Affinity purified, lyophilized
	Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.2mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 10mg/ml bovine serum albumin (BSA) as a stabilizer and 0.01% thimerosal as a preservative.
Stability:	Original vial: 1 year at 4° - 8°C
	Stock solution or aliquots thereof: 1 year at -20°C. Avoid repeated thawing and freezing.
Applications:	Tested for immunohistochemistry (IHC), has been reported to work in ELISA.
	Approximate working dilution for IHC: Frozen sections: 0.5µg/ml (1:400) Paraffin sections: 1µg/ml (1:200); pretreatment not necessary.
	Optimal dilutions should be determined by the end user.
	Suggested positive control: Human tonsil. Immunogen: Purified pepsin fragments of human type IV collagen from human kidneys.
Antigen, epitope:	The antibody recognizes a conformational epitope on a helical part of native collagen IV and loses its reactivity on denaturing the collagen IV protein. The antigen is stable to formalin fixation, however.

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Antigen distribution:	Tissue sections: Basically all basement membranes except corneal epithelium.
Specificity:	Human: collagen IV.
	Other species: bovine collagen IV).

Selected references

B.F. Odermatt et al.: Monoclonal antibodies to human type IV collagen: useful reagents to demonstrate the heterodimeric nature of the molecule. Proc Natl Acad Sci, USA **81**: 7343-7347 (1984)

T. Matsubara & M. Ziff: Basement membrane thickening of postcapillary venules and capillaries in rheumatoid synovium. Arthritis and Rheumatism **30**: 18-30 (1987).

For in vitro research only. Caution: this product contains thimerosal, a poisonous and hazardous substance.