
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.

This antibody was produced serum-free, without fetal calf serum.

Product number: T-1201

Clone: CIV22

Lot: 08PO1402

TECHNICAL AND ANALYTICAL CHARACTERISTICS:

Host species; subclass:	Mouse IgG1, kappa light chain
Quantity:	100µg
Purification / Physical State:	Protein G purified, lyophilized
Format:	Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.2mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 5mg/ml bovine serum albumin (BSA) as a stabilizer, and 0.05% (v/v) Kathon CG as a preservative.
Storage and stability:	Original vial with lyophilized antibody is stable for 1 year from date of despatch. Aliquots of stock solution can be kept 1 month at 4°C or frozen at -20°C for two years from date of reconstitution; do not freeze working dilutions.
Applications:	Tested for immunohistochemistry (IHC), has been reported to work in ELISA. Approximate working dilution for IHC: Frozen sections: 0.125µg/ml (1:1600) Paraffin sections: 0.5µg/ml (1:400); Proteinase K pretreatment for antigen retrieval is recommended. Optimal dilutions should be determined by the end user. Suggested positive control: Human tonsil. Please see www.bma.ch for protocols and general information.
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.

Antigen distribution:

Tissue sections: Basically all basement membranes except corneal epithelium.

Specificity:

Human: collagen IV.

Other species: bovine and swine 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. This product contains Kathon CG as a preservative.