



Mouse Anti-Human Collagen Typ-IV,
monoclonal

CatNo **K047**

BatchNo: See Label
Expiration Date: See Label
Storage: 2-8°C for 1 month
-20°C for longer

Background:

The composition of the extracellular matrix of all vertebrates is dominated by a class of molecules known as collagens, each with a unique feature suited to its function and location. Type IV collagen is a major constituent of basement membranes. This molecule is a continuous triple helix, about 400 nm in length, composed of at least two different α chain subunits termed $\alpha 1$ (IV) and $\alpha 2$ (IV) which may be composed of the same or different molecules. Upon proteolysis, fragments of 125 kDa, 95 kDa, and 60 kDa are released from a parent $\alpha 1$ (IV) chain, whereas fragments of 115 kDa, 80 kDa, and 45 kDa apparently originate from a distinct $\alpha 2$ (IV) chain.

Monoclonal Anti-Collagen Type IV (mouse IgG1 isotype) is derived from the COL-94 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with human collagen Type IV.

Clone Number:

COL94

Volume/Quantity:

0.1 ml

Product Form:

Ascites - liquid

Preservatives Stabilisers:

15 mM Sodium Azide (NaN₃)

Immunogen:

Purified full length native human Collagen IV.

Isotype:

IgG1 (Mouse)

Specificity:

The monoclonal antibody E047 (COL-94) is directed exclusively against type IV collagen. It does not react with other types of collagen or with other connective tissue proteins. The anti-collagen IV antibody allows to reveal the importance of basement membranes in tissue differentiation, cell growth or neoplasia. Destruction of the epithelial basement membrane is considered an important criterion for malignant invasive growth. In particular, invasive ductal breast carcinomas usually show complete loss of the basement membrane.

Applications:

Suggested Working Dilution

FlowCytometry	Not tested	
Immunohistology-frozen	Yes	
Immunohistology-paraffin	Yes	1/100 – 1/500
Immunohistology-resin	Not tested	
ELISA	Not tested	
Immunoprecipitation	Not tested	
Western Blotting	Not tested	
Radioimmunoassay	Not tested	

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

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Immunohistology

Positive Control Tissue: Human skin tissue.
Recommended Secondary Reagents: F(ab')₂ rabbit anti-mouse IgG HRP conjugate – (LINARIS CatNo LST0013B) Vectastain[®] ABC Mouse IgG (Vector CatNo AK-5002) and Substrate-Kit e.g. Vector[®] Red (Vector CatNo SK-5100).
Vectastain[®] ABC-Elite Mouse IgG (Vector CatNo PK-6102) and Peroxidase Substrate-Kit e.g. DAB (LINARIS CatNo E108) or HistoGreen (LINARIS CatNo E109).
Recommended Negative Controls: Mouse IgG1 Negative Control (LINARIS CatNo ITC0928)

Storage Conditions: Store at 2-8°C for one month or at -20°C for longer!
Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life: 12 months from date of despatch.
Health and Safety Information: (A full Health and Safety assessment is available upon request)
This product contains sodium azide: a POISONOUS and HAZARDOUS SUBSTANCE which should be handled by trained staff only.

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For Research purposes only. Not for therapeutic or diagnostic use.

