

BACKGROUND

The collagens are a family of closely related but distinct extracellular matrix proteins. At least 19 proteins representing more than 30 gene products have now been defined as collagens, and at least another 10 proteins contain collagen-like domains. All collagen molecules consist of three polypeptide chains, called alpha chains, which are coiled around one another into a triple-helical conformation. In some collagen types all three alpha chains of the molecule are identical, while in others the molecule contains two or three different alpha chains. The most abundant collagens form extracellular fibrils and are hence known as fibril-forming collagens, while others form supramolecular aggregates of other kinds.¹

Type III collagen is a member of the fibrillar collagen family and comprises three alpha1 (III) chains. Type III collagen is expressed in early embryos and throughout embryogenesis. In the adult, type III collagen is a major component of the extracellular matrix in a variety of internal organs and skin. Type III collagen is localized with the most abundant member of the family, type I collagen, in such tissues as blood vessels and skin. Mutations in the COL3A1 gene have been implicated as a cause of type IV Ehlers-Danlos syndrome, a disease leading to aortic rupture in early adult life.²

References:

1. Knott, J. & Bailey, A.J.: Bone 22:181-7, 1998
2. Powell, J.T. et al: Eur. J. Vascul. Surg. 5:145-8, 1991

TECHNICAL INFORMATION

Source:

Type III collagen is a mouse monoclonal antibody raised against a short peptide from human type III collagen sequence.

Specificity and Sensitivity:

This antibody detects endogenous levels of type III collagen proteins without cross-reactivity with other related proteins.

Storage Buffer: 1.2% sodium acetate, 2mg BSA, 0.01mg NaN₃

Storage:

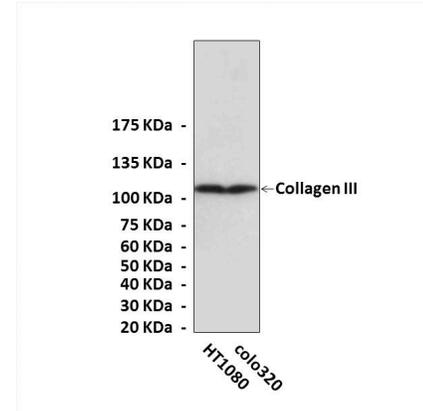
Store at -20°C for at least one year. Store at 4°C for frequent use. Avoid repeated freeze-thaw cycles.

APPLICATIONS

Application:	*Dilution:
WB	1:1000
IP	n/d
IHC	1:50-200
ICC	n/d
FACS	n/d

*Optimal dilutions must be determined by end user.

QUALITY CONTROL DATA



Western Blot detection of type III Collagen proteins in HT1080 and Colo320 cell lysates using Type III Collagen Antibody.

