

MONOCLONAL ANTIBODY

For research use only. Not for clinical diagnosis.

Cat No. PRPG-CO12-M01

Anti-Collagen type XII (378D5)

BACKGROUND

Type XII collagen is a member of the FACIT (fibril-associated collagens with interrupted triple helices) collagen subfamily curently composed of 9 members (collagen types VII, IX, XII, XIV, XVI, XIX, XX, and XXI). Type XII collagen is a homotrimer composed of three alpha–1(XII) chains with an approximate Mr of 220 kDa. This collagen was originally found in prevalent association with type I collagen in tendons, ligaments, perichondrium, and periosteum and all dense connective tissues, but more recent studies also document association of the collagen with basement membranes. The type XII-type I collagen connection is thought to modify the interactions between collagen type I fibrils and the surrounding matrix such as to create specific macromolecular configuration of the ECM. Alternatively spliced transcript variants encoding different isoforms of the collagen have been identified. Rotary shadowing/TEM analyses shows a structure with a thin 75-nm tail, which is frequently kinked, attached through a central globule to three finger-like projections, each 60 nm long.

Product type Primary antibodies

Host Mouse

Source Hybridoma cell culture

Form Liquid

Supernatant with 0.05% NaN₃ as a preservative.

Volume 2ML

Specificity Collagen type XII

Antigen Purified laminin-collagen complexes from bovine kidney

Isotype IgG1 **Clone** 378D5

Application notes Recommended use: WB, IP, IHC, ELISA

Recommended dilutions Western blotting : 1/10 to 1/50

~220 kDa SDS-PAGE under reducing conditions; >600 kDa under non-reducing conditions

Immunoprecipitation: 1/5 - 1/10

Immunohistochemistry: 1/25 to 1/100 (on frozen tissue sections)

ELISA: 1/10 – 1/250

Optimal dilutions/concentrations should be determined by the end user.

Staining Pattern

mAb 378D5 stains connective tissue ECMs of a variety of organs, including kidney, spleen,

lung, placenta, skin and liver.

Cross reactivity Human, Bovine, Avian (WB, IHC)

Storage Store at 4°C (-20° C for prolonged storage)

Aliquot to avoid cycles of freeze/thaw.

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