



**MONOCLONAL ANTIBODY**

*For research use only. Not for clinical diagnosis*

**Catalog 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 currently composed of 9 members (collagen types VII, IX, XII, XIV, XVI, XIX, XX, and XXI). Type XII collagen is a homotrimer composed of three  $\alpha 1(\text{XII})$  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.

<b>Product type</b>	Primary antibodies
<b>Immunogen</b>	Purified laminin-collagen complexes from bovine kidney
<b>Raised in</b>	Mouse
<b>Myeloma</b>	-
<b>Clone number</b>	378D5
<b>Isotype</b>	IgG1
<b>Host</b>	-
<b>Source</b>	Hybridoma cell culture
<b>Purification</b>	-
<b>Form</b>	Liquid
<b>Storage buffer</b>	Supernatant supplemented with 0.05% NaN <sub>3</sub>
<b>Concentration</b>	ND
<b>Volume</b>	2 mL
<b>Label</b>	Unlabeled
<b>Specificity</b>	Collagen type XII
<b>Cross reactivity</b>	Human, Bovine, Mouse, Chicken
<b>Storage</b>	Store at 4°C for short-term storage and -20°C for prolonged storage Aliquot to avoid cycles of freeze / thaw.

<b>Application notes</b>	WB, IP, IHC, ELISA
<b>Recommended dilutions</b>	<ul style="list-style-type: none"> <li>• Western blotting : 1/10 – 1/50                  -220 kDa SDS-PAGE under reducing conditions                  &gt;600 kDa under non-reducing conditions</li> <li>• Immunoprecipitation : 1/5 - 1/10</li> <li>• Immunohistochemistry : 1/25 - 1/100 (on frozen tissue sections)                  MAb 378D5 stains connective tissue ECMs of a variety of organs, including kidney, spleen, lung, placenta, skin and liver.</li> <li>• ELISA : 1/10 - 1/250</li> </ul>

Other applications have not been tested.  
Optimal dilutions/concentrations should be determined by the end user.

**References**

-

*For research use only. Not for clinical diagnosis.*



COSMO BIO CO., LTD.

Inspiration for Life Science

TOYO 2CHOME, KOTO-KU, TOKYO, 135-0016, JAPAN

URL: <http://www.cosmobio.co.jp> e-mail: [export@cosmobio.co.jp](mailto:export@cosmobio.co.jp)

[Outside Japan] Phone : +81-3-5632-9617 [国内連絡先] Phone : +81-3-5632-9610

FAX : +81-3-5632-9618 FAX : +81-3-5632-9619