

**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**

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