

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects recombinant human COL4A1 protein in Direct ELISA.
<b>Source</b>	Monoclonal Mouse IgG Clone # 1106301
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Synthetic peptide Accession # P02462
<b>Conjugate</b>	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
<b>Formulation</b>	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide.  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

**APPLICATIONS**

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

**Immunohistochemistry** Optimal dilution of this antibody should be experimentally determined.

**PREPARATION AND STORAGE**

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

**BACKGROUND**

COL4A1 (collagen IV  $\alpha 1$ ) is a 185 kDa member of the type IV collagen family. It is a secreted glycoprotein that is expressed by multiple cell types, including fibroblasts, keratinocytes and endothelial cells. Two COL4A1 molecules interact with a 170 kDa  $\alpha 2$  chain to form a collagen IV triple helix. This helix further interacts with other helices to generate covalent oligomers that form a scaffold in the basement membrane. Mature human COL4A1 is 1642 amino acids (aa) in length. It has an N-terminal "7S" proregion (aa 28-172), a central collagenous domain that contains multiple Gly-based repeats (aa 173-1440), and a C-terminal domain that is proteolytically cleaved to generate a 25-28 kDa NC1 globular segment that has potent antiangiogenic activity (aa 1441-1669). Multiple splice forms exist. One shows a deletion of aa 499-849, a second shows a seven aa substitution for aa 513-1669, and a third shows a seven aa substitution for aa 958-1669. Over aa 1441-1669, human COL4A1 is 97% aa identical to mouse COL4A1.

**PRODUCT SPECIFIC NOTICES**

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.