

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Collagen XIII α 1 in direct ELISAs. In direct ELISAs, 100% cross-reactivity with recombinant mouse Collagen XIII α 1 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 584718
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Collagen XIII α 1 Glu109-Pro668 Accession # Q5TAT6
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% 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

COL13A1 (collagen 13-alpha 1) is a 95 kDa member of the transmembrane group of the collagen family of proteins. It is a type II transmembrane glycoprotein that is expressed by multiple cell types, including fibroblasts, endothelial cells, and cardiac muscle. COL13A1 forms disulfide-linked homotrimers and participates in cell adhesion by binding to the Integrin α 1 subunit, Nidogen-2, and Fibronectin. Human COL13A1 is 717 amino acids (aa) in length. It has an N-terminal 44 aa cytoplasmic region plus a 656 aa extracellular domain (ECD) (aa 62-717). The ECD contains four non-collagenous (NC) regions (aa 1-121, aa 217-269, aa 442-463, and aa 700-717) interspersed among three collagenous (COL) domains (aa 122-216, aa 270-441, and aa 464-699). Multiple splice forms exist and typically involve deletions of 12-30 aa between aa 220-705. Proteolytic cleavage after Arg108 generates an 85-90 kDa soluble form. Over aa 109-668 (based on a human isoform [NP_542992] that shows a deletion of aa 239-260, aa 551-565, and aa 616-627), human COL13A1 shares 91% aa sequence identity with mouse COL13A1.

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.