



[Go to Product page](#)

Datasheet for ABIN372599

anti-Collagen Type I antibody

2 Images

3 Publications

Overview

Quantity:	0.1 mL
Target:	Collagen Type I (COL1)
Reactivity:	Human, Mouse, Mammalian, Fish, Amphibian, Avian
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Collagen Type I antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Frozen Sections) (IHC (fro)), Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	Peptide from the Human Collagen I Alpha-1 propeptide sequence.
Isotype:	IgG
Specificity:	Specific for the ~180 kDa Collagen I Alpha-1 Propeptide in Human lung fibroblast extract.
Cross-Reactivity (Details):	Species reactivity (expected):most (if not all) Species of Mammals, Birds, Amphibians and Fishes. Species reactivity (tested):Human and Mouse.
Purification:	Affinity Chromatography.

Target Details

Target:	Collagen Type I (COL1)
Alternative Name:	Collagen Type I (COL1 Products)

Target Details

Background: Collagen is the most abundant protein in mammals with type 1 collagen being the most abundant of the 29 known collagens. Type 1 collagen is integral in the strengthening and structural support of many tissues including skin, tendon, artery walls, fibrocartilage, bone and teeth. Collagens are synthesized with N-terminal and C-terminal propeptides that are cleaved during maturation and secretion. After cleavage of the propeptides, the most N-terminal and C-terminal remaining sequences are known as telopeptides. Mutations in the collagen 1, alpha 1 gene (COL1A1) are known to cause osteogenesis imperfecta (aka brittle bone disease) (Byers 1989). Furthermore, mutations found in the first 90 residues of the helical region of alpha 1 collagen have been implicated in the prevention or delayed removal of the procollagen N-propeptide leading to a combined osteogenesis imperfecta and Ehlers-Danlos syndrome (EDS) phenotype (Cabral et al., 2005). Synonyms: Alpha-1 type I collagen, Alpha-2 type I collagen, COL1A1, COL1A2

Gene ID: 1277

NCBI Accession: [NP_000079](#)

UniProt: [P02452](#)

Application Details

Application Notes: Western Blot: 1/1000. Immunohistochemistry: 1/100. The antibody also works well for Immunohistochemistry on Paraformaldehyde-Fixed Sections with a simple antigen-retrieval protocol (incubate slides for 20 minutes at 90 °C in 10 mM sodium citrate (pH 6.0)/ 0.1 % Tween-20). Note that in Paraffin Sections of Formaldehyde-Fixed fibrotic mouse lung tissue, it recognizes collagen I molecules that are still associated with the cells in which they were synthesized.

Other applications not tested.

Optimal dilutions are dependent on conditions and should be determined by the user.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: Liquid in PBS. Contains no preservative

Preservative: Without preservative

Handling Advice: Avoid repeated freezing and thawing.

Handling

Storage: -20 °C

Storage Comment: Store the antibody undiluted (in aliquots) at -20 °C.

Publications

Product cited in: Montserrat, Ramírez-Bajo, Xia, Sancho-Martinez, Moya-Rull, Miquel-Serra, Yang, Nivet, Cortina, González, Izpisua Belmonte, Campistol: "Generation of induced pluripotent stem cells from human renal proximal tubular cells with only two transcription factors, OCT4 and SOX2." in: **The Journal of biological chemistry**, Vol. 287, Issue 29, pp. 24131-8, (2012) ([PubMed](#)).

Vassena, Montserrat, Carrasco Canal, Aran, de Oñate, Veiga, Izpisua Belmonte: "Accumulation of instability in serial differentiation and reprogramming of parthenogenetic human cells." in: **Human molecular genetics**, Vol. 21, Issue 15, pp. 3366-73, (2012) ([PubMed](#)).

Montserrat, Bahima, Batlle, Häfner, Rodrigues, González, Izpisúa Belmonte: "Generation of pig iPS cells: a model for cell therapy." in: **Journal of cardiovascular translational research**, Vol. 4, Issue 2, pp. 121-30, (2011) ([PubMed](#)).

Montserrat, Garreta, González, Gutiérrez, Eguizábal, Ramos, Borrós, Izpisua Belmonte: "Simple generation of human induced pluripotent stem cells using poly-beta-amino esters as the non-viral gene delivery system." in: **The Journal of biological chemistry**, Vol. 286, Issue 14, pp. 12417-28, (2011) ([PubMed](#)).

Rodríguez-Pizà, Richaud-Patin, Vassena, González, Barrero, Veiga, Raya, Izpisúa Belmonte: "Reprogramming of human fibroblasts to induced pluripotent stem cells under xeno-free conditions." in: **Stem cells (Dayton, Ohio)**, Vol. 28, Issue 1, pp. 36-44, (2010) ([PubMed](#)).

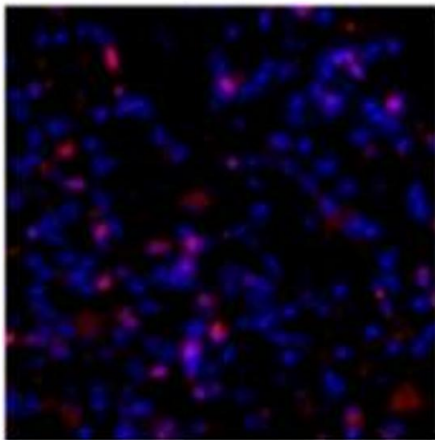
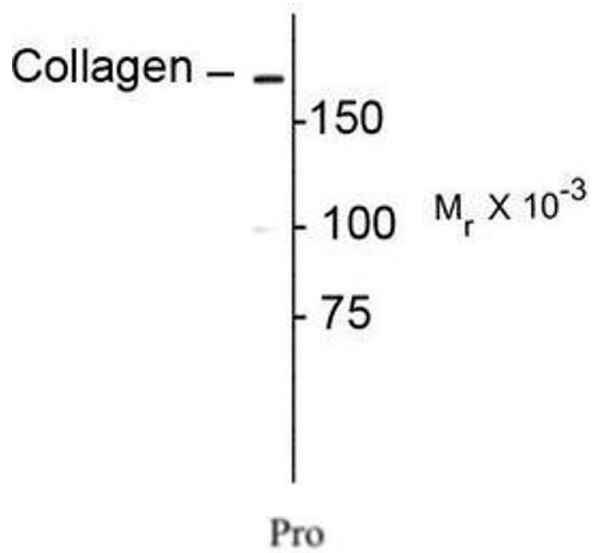


Image 1.

Image 2.