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Anti-Collagen 1, alpha 1 propeptide Antibody

Our Anti-Collagen 1, alpha 1 propeptide primary antibody from PhosphoSolutions is rabbit polyclonal.
Catalog # AN1340

Product Information

Application	WB, IHC
Primary Accession	P02452
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	138911

Additional Information

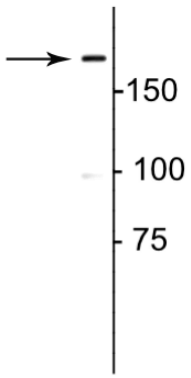
Gene ID	1277
Other Names	Alpha 1 type I collagen antibody, Alpha 2 type I collagen antibody, alpha 2 type I procollagen antibody, alpha 2(I) procollagen antibody, alpha 2(I)-collagen antibody, Alpha-1 type I collagen antibody, alpha1(I) procollagen antibody, CO1A1_HUMAN antibody, COL1A1 antibody, COL1A2 antibody, collagen alpha 1 chain type I antibody, Collagen alpha-1(I) chain antibody, collagen alpha-1(I) chain preproprotein antibody, Collagen I alpha 1 polypeptide antibody, Collagen I alpha 2 polypeptide antibody, collagen of skin tendon and bone, alpha-1 chain antibody, collagen of skin tendon and bone alpha-2 chain antibody, Collagen type I alpha 1 antibody, Collagen type I alpha 2 antibody, EDSC antibody, OI1 antibody, OI2 antibody, OI3 antibody, OI4 antibody, pro-alpha-1 collagen type 1 antibody, type I proalpha 1 antibody, type I procollagen alpha 1 chain antibody, Type I procollagen antibody
Target/Specificity	Collagen is an extracellular matrix protein that serves as a scaffold defining the shape and mechanical properties of many tissues and organs including skin, tendon, artery walls, fibrocartilage, bone and teeth. Type 1 collagen is the most abundant protein in mammals. 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)
Dilution	WB~~1:1000 IHC~~1:100~500
Format	Antigen Affinity Purified

Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-Collagen 1, alpha 1 propeptide Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

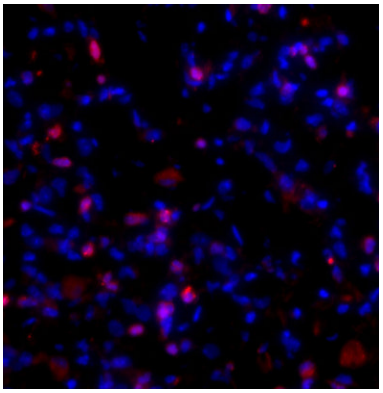
Background

Collagen is an extracellular matrix protein that serves as a scaffold defining the shape and mechanical properties of many tissues and organs including skin, tendon, artery walls, fibrocartilage, bone and teeth. Type 1 collagen is the most abundant protein in mammals. 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)

Images



Western blot of rat lung lysate showing specific immunolabeling of the ~180 kDa collagen 1.



Immunostaining of fibrotic mouse lung tissue showing specific staining of collagen I molecules (cat. 621-COLP, 1:100, red) that are still associated with the cells in which they were synthesized. The blue is staining DNA.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.