



# COL1A2 Monoclonal Antibody

Catalog No	BYmab-16978
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB
Gene Name	COL1A2
Protein Name	Collagen alpha-2(I) chain
Immunogen	The antiserum was produced against synthesized peptide derived from human Collagen I alpha2. AA range:471-520
Specificity	COL1A2 Monoclonal Antibody detects endogenous levels of COL1A2 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	COL1A2; Collagen alpha-2(I) chain; Alpha-2 type I collagen
Observed Band	125kD
Cell Pathway	Secreted, extracellular space, extracellular matrix .
Tissue Specificity	Forms the fibrils of tendon, ligaments and bones. In bones the fibrils are mineralized with calcium hydroxyapatite.
Function	disease:A chromosomal rearrangement involving COL1A2 may be a cause of lipoblastomas, which are benign tumors resulting from transformation of adipocytes, usually diagnosed in children. Translocation t(7;8)(p22;q13) with PLAG1.,disease:Defects in COL1A2 are a cause of osteogenesis imperfecta type I (OI-I) [MIM:166200]. OI-I is a dominantly inherited serious newborn disease characterized by bone fragility, normal stature, little or no deformity, blue sclerae and hearing loss in 50% of families. Dentinogenesis imperfecta is rare and may distinguish a subset of OI type I (formation of dentine).,disease:Defects in COL1A2 are a cause of osteogenesis imperfecta type II (OI-II) [MIM:166210]; also known as osteogenesis imperfecta congenita (OIC) or lethal perinatal. OI-II is a serious newborn disease that diffusely affects bone. Infants are born with multiple

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fractures, which lead to shortening

## Background

This gene encodes the pro- $\alpha 2$  chain of type I collagen whose triple helix comprises two  $\alpha 1$  chains and one  $\alpha 2$  chain. Type I is a fibril-forming collagen found in most connective tissues and is abundant in bone, cornea, dermis and tendon. Mutations in this gene are associated with osteogenesis imperfecta types I-IV, Ehlers-Danlos syndrome type VIIB, recessive Ehlers-Danlos syndrome Classical type, idiopathic osteoporosis, and atypical Marfan syndrome. Symptoms associated with mutations in this gene, however, tend to be less severe than mutations in the gene for the  $\alpha 1$  chain of type I collagen (COL1A1) reflecting the different role of  $\alpha 2$  chains in matrix integrity. Three transcripts, resulting from the use of alternate polyadenylation signals, have been identified for this gene. [provided by R. Dalgleish, Feb 2008],

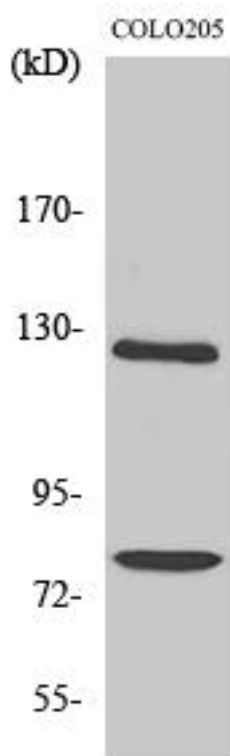
## matters needing attention

Avoid repeated freezing and thawing!

## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western Blot analysis of various cells using COL1A2 Monoclonal Antibody