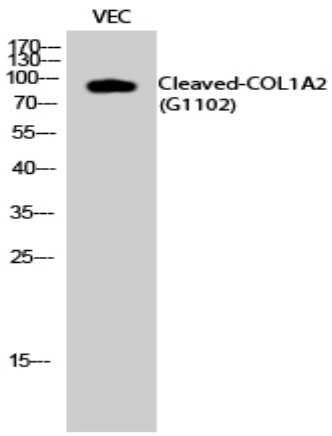
Best Tools for immunology Research

Cleaved-COL1A2 (G1102) Polyclonal Antibody

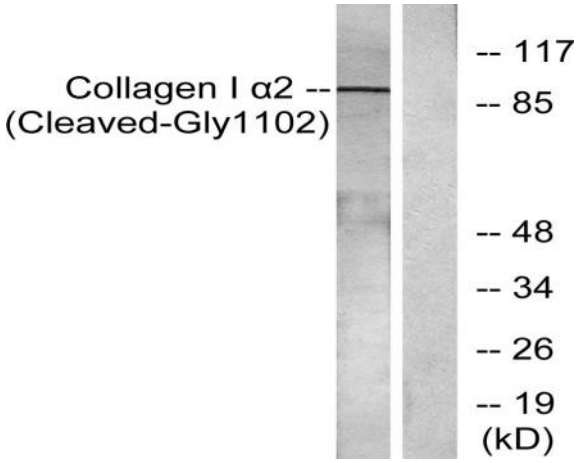
Catalog No :	YC0049
Reactivity :	Human;Rat;Mouse;
Applications :	WB;ELISA
Target :	COL1A2
Fields :	>>PI3K-Akt signaling pathway;>>Focal adhesion;>>ECM-receptor interaction;>>Platelet activation;>>Relaxin signaling pathway;>>AGE-RAGE signaling pathway in diabetic complications;>>Protein digestion and absorption;>>Amoebiasis;>>Human papillomavirus infection;>>Proteoglycans in cancer;>>Diabetic cardiomyopathy
Gene Name :	COL1A2
Protein Name :	Collagen alpha-2(I) chain
Human Gene Id :	1278
Human Swiss Prot No :	P08123
Mouse Swiss Prot No :	Q01149
Immunogen :	The antiserum was produced against synthesized peptide derived from human Collagen I alpha2. AA range:1053-1102
Specificity :	Cleaved-COL1A2 (G1102) Polyclonal Antibody detects endogenous levels of fragment of activated COL1A2 protein resulting from cleavage adjacent to G1102.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	92kD
Cell Pathway :	Focal adhesion;ECM-receptor interaction;
Background :	This gene encodes the pro-alpha2 chain of type I collagen whose triple helix comprises two alpha1 chains and one alpha2 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 alpha1 chain of type I collagen (COL1A1) reflecting the different role of alpha2 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],
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 fractures, which lead to shortening
Subcellular Location :	Secreted, extracellular space, extracellular matrix .
Expression :	Forms the fibrils of tendon, ligaments and bones. In bones the fibrils are mineralized with calcium hydroxyapatite.

Products Images



Western Blot analysis of VEC cells using Cleaved-COL1A2 (G1102) Polyclonal Antibody diluted at 1:1000



Western blot analysis of lysates from Jurkat cells, treated with etoposide 25uM 24h, using Collagen I alpha2 (Cleaved-Gly1102) Antibody. The lane on the right is blocked with the synthesized peptide.