

**Cat. No:** AB-82138  
**Conjugate:** Unconjugated  
**Size:** 100 ug  
**Clone:** POLY  
**Concentration:** 1mg/ml  
**Host:** Rabbit  
**Isotype:** IgG

**Immunogen:** A synthetic peptide corresponding to a sequence at the C-terminus of mouse Collagen I, identical to the related rat sequence, and different from the related human sequence by two amino acids.

**Reactivity:** Human, Mouse, Rat

**Applications:** Western Blot: 1:500 -1:2000  
 Immunofluorescence: 1:50 - 1:200  
 Immunocytochemistry: 1:50 - 1:200  
 Immunohistochemistry: 1:50-1:200

**Molecular Weight:** 140kDa/220kDa

**Purification:** Aff. Pur.

**Synonyms:** COL1A1; EDSC; OI1; OI2; OI3; OI4

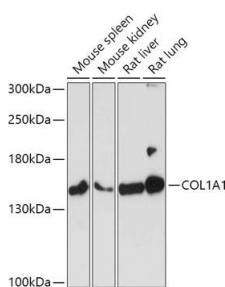
**Background:**

This gene encodes the pro-alpha1 chains 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 VIIA, Ehlers-Danlos syndrome Classical type, Caffey Disease and idiopathic osteoporosis. Reciprocal translocations between chromosomes 17 and 22, where this gene and the gene for platelet-derived growth factor beta are located, are associated with a particular type of skin tumor called dermatofibrosarcoma protuberans, resulting from unregulated expression of the growth factor. Two transcripts, resulting from the use of alternate polyadenylation signals, have been identified for this gene.

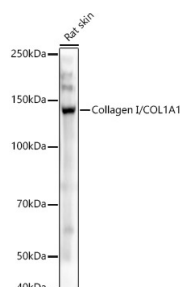
**Form:** Liquid

**Buffer:** Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na<sub>2</sub>HPO<sub>4</sub>.

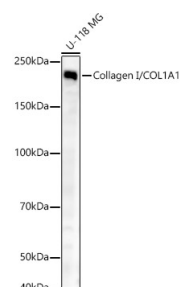
**Storage:** Store at -20°C. Avoid freeze / thaw cycles.



Western blot analysis of extracts of various cell lines, using COL1A1 antibody

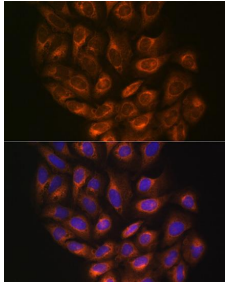


Western blot analysis of Rat skin, using Collagen I/COL1A1 antibody



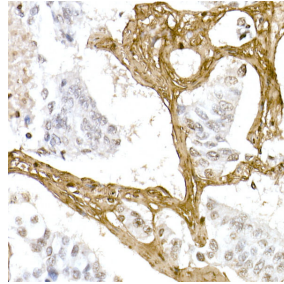
Western blot analysis of U-118 MG, using Collagen I/COL1A1 antibody at 1:800

at 1:1000 dilution. Secondary antibody:  
HRP Goat Anti-Rabbit IgG (H+L) at  
1:10000 dilution.  
Lysates/proteins: 25ug per lane.  
Blocking buffer: 3% nonfat dry milk in  
TBST.  
Detection: ECL Basic Kit  
Exposure time: 3min.



Immunofluorescence analysis of NIH/3T3  
cells using Collagen I/COL1A1 Rabbit pAb  
(A1352) at dilution of 1:50 (40x lens).  
Blue:  
DAPI for nuclear staining.

at 1:800 dilution.  
Secondary antibody: HRP Goat Anti-  
Rabbit IgG (H+L) at 1:10000 dilution.  
Lysates/proteins: 25ug per lane.  
Blocking buffer: 3% nonfat dry milk in  
TBST.  
Detection: ECL West Pico Plus.  
Exposure time: 3s.



Immunohistochemistry of  
paraffinembedded human lung cancer  
using Collagen I/COL1A1 Rabbit pAb at  
dilution of 1:100 (40x lens). Perform  
microwave antigen retrieval with 10 mM  
PBS buffer pH 7.2 before commencing  
with IHC staining protocol.

dilution.  
Secondary antibody: HRP Goat Anti-  
Rabbit IgG (H+L) at 1:10000 dilution.  
Lysates/proteins: 25ug per lane.  
Blocking buffer: 3% nonfat dry milk in  
TBST.  
Detection: ECL West Pico Plus.  
Exposure time: 10s.