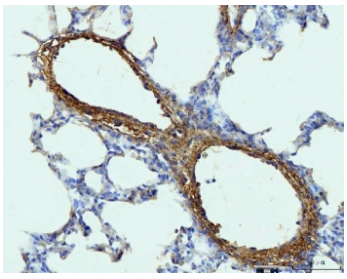
Collagen I Antibody / COL1A1 (R32436)

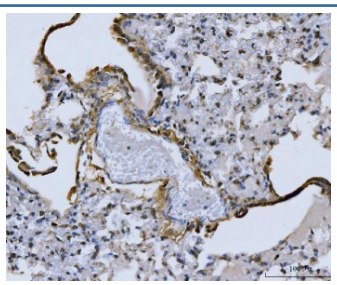
Catalog No.	Formulation	Size
R32436	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

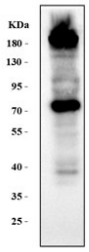
Availability	1-3 business days
Species Reactivity	Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% Trehalose
UniProt	P11087
Localization	Cytoplasmic
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This Collagen I antibody is available for research use only.



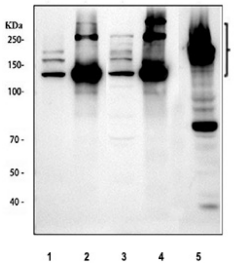
IHC staining of FFPE rat lung tissue with Collagen I antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



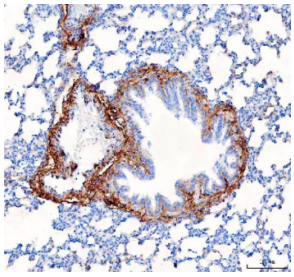
IHC staining of FFPE mouse lung tissue with Collagen I antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



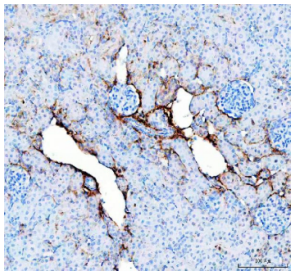
Western blot testing of mouse NIH 3T3 cell lysate with Collagen I antibody. Expected molecular weight: 140-210 kDa (precusor), 70-90 kDa (mature).



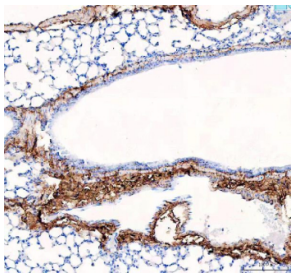
Western blot testing of 1) rat lung, 2) rat skin, 2) mouse lung, 4) mouse skin and 5) mouse NIH 3T3 cell lysate with Collagen I antibody. Expected molecular weight: 140-210 kDa (precusor), 70-90 kDa (mature).



IHC staining of FFPE rat lung tissue with Collagen I antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE rat kidney tissue with Collagen I antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE mouse lung tissue with Collagen I antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

Description

Collagen I is the most abundant collagen type in the human body and a major structural component of the extracellular matrix. It is composed of two alpha-1 chains and one alpha-2 chain, forming a triple-helical structure that provides tensile strength and structural integrity to connective tissues. Collagen I is found in skin, bone, tendon, ligament, and cornea, where it plays a key role in maintaining tissue architecture and mechanical resilience.

Collagen I synthesis and organization are critical for normal development, wound healing, and tissue repair. Alterations in its expression or structure have been linked to fibrotic diseases, connective tissue disorders, and certain tumor microenvironments. Because of its widespread presence and biological importance, Collagen I is a central focus in

studies of tissue biology, biomaterials, and regenerative medicine.

The **Collagen I antibody** is an essential tool for detecting Collagen I in applications such as immunohistochemistry, western blot, and immunofluorescence. Researchers use the Collagen I antibody from NSJ Bioreagents to assess extracellular matrix composition, monitor tissue remodeling, and evaluate fibrosis-related changes. With high specificity and consistent performance, the Collagen I antibody supports research in cell biology, pathology, and extracellular matrix biology.

Application Notes

Optimal dilution of the Collagen I antibody should be determined by the researcher.

Immunogen

Amino acids YDFSFLPQPPQEKSQDGGRYYRA were used as the immunogen for the Collagen I antibody.

Storage

After reconstitution, the Collagen I antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

References (1)