

Product datasheet

Natural Human Collagen III protein ab7535

★★★★☆ 3 Abreviews 1 References 1 Image

Overview

Product name	Natural Human Collagen III protein
Protein length	Full length protein

Description

Nature	Native
Source	Native
Amino Acid Sequence	
Species	Human

Specifications

Our [Abpromise guarantee](#) covers the use of **ab7535** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Immunoprecipitation ELISA
Form	Liquid

Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. pH: 4.50 Constituent: 3% Acetic acid
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General Info

Function	Collagen type III occurs in most soft connective tissues along with type I collagen.
Involvement in disease	Defects in COL3A1 are a cause of Ehlers-Danlos syndrome type 3 (EDS3) [MIM:130020]; also known as benign hypermobility syndrome. EDS is a connective tissue disorder characterized by hyperextensible skin, atrophic cutaneous scars due to tissue fragility and joint hyperlaxity. EDS3 is a form of Ehlers-Danlos syndrome characterized by marked joint hyperextensibility without

skeletal deformity.

Defects in COL3A1 are the cause of Ehlers-Danlos syndrome type 4 (EDS4) [MIM:130050]. EDS4 is a connective tissue disorder characterized by hyperextensible skin, atrophic cutaneous scars due to tissue fragility and joint hyperlaxity. EDS4 is the most severe form of the disease. It is characterized by the joint and dermal manifestations as in other forms of the syndrome, characteristic facial features (acrogeria) in most patients, and by proneness to spontaneous rupture of bowel and large arteries. The vascular complications may affect all anatomical areas. Defects in COL3A1 are a cause of susceptibility to aortic aneurysm abdominal (AAA) [MIM:100070]. AAA is a common multifactorial disorder characterized by permanent dilation of the abdominal aorta, usually due to degenerative changes in the aortic wall. Histologically, AAA is characterized by signs of chronic inflammation, destructive remodeling of the extracellular matrix, and depletion of vascular smooth muscle cells.

Sequence similarities

Belongs to the fibrillar collagen family.
Contains 1 fibrillar collagen NC1 domain.
Contains 1 VWFC domain.

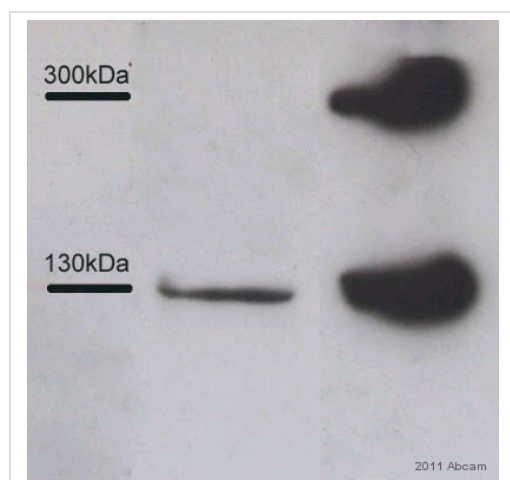
Post-translational modifications

Proline residues at the third position of the tripeptide repeating unit (G-X-Y) are hydroxylated in some or all of the chains.
O-linked glycan consists of a Glc-Gal disaccharide bound to the oxygen atom of a post-translationally added hydroxyl group.

Cellular localization

Secreted > extracellular space > extracellular matrix.

Images



Western blot - Natural Human Collagen III protein (ab7535)

Image courtesy of Michaela Leyh by Abreview.

All lanes : Anti-Collagen III antibody [FH-7A] ([ab6310](#)) at 1/500 dilution

Lane 1 : plus ab7535 reduced and denatured

Lane 2 : plus ab7535 native

Secondary

All lanes : Goat anti-mouse-HRP at 1/2000 dilution

The protein can be used reduced + denatured (band size ~130 kDa) or native (two bands ~ 130kDa and ~300kDa) The native protein gives a brighter signal.

PH of the protein lysate is low - a loading dye with bromphenolblue changes its colour. This does not effect the western blot.

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