abcam

Product datasheet

Recombinant Mouse Collagen III protein (His tag) ab196093

Description

Product name	Recombinant Mouse Collagen III protein (His tag)
Purity	> 95 % SDS-PAGE. Purity greater than 95% as determined by SEC-HPLC and reducing SDS-PAGE.
Endotoxin level	< 1.000 Eu/µg
Expression system	HEK 293 cells
Accession	P08121
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Mouse
Sequence	QFDSYDVKSGVGGMGGYPGPAGPPGPPGPPGSSGHPG SPGSPGYQGPPGE PGQAGPAGPPGPPGALGPAGPAGKDGESGRPGRPGER GLPGPPGIKGPAG MPGFPGMKGHRGFDGRNGEKGETGAPGLKGENGLPGD NGAPGPMGPRGAP GERGRPGLPGAAGARGNDGARGSDGQPGPPGPPGTAG FPGSPGAKGEVGP AGSPGSNGSPGQRGEPGPQGHAGAQGPPGPPGNNGSP GGKGEMGPAGIPG APGLIGARGPPGPAGTNGIPGTRGPSGEPGKNGAKGEPG ARGERGEAGSP GIPGPKGEDGKDGSPGEPGANGLPGAAGERGPSGFRGP AGPNGIPGEKGP PGERGGPGPAGPRGVAGEPGRDGTPGGPGIRGMPGSP GGPGNDGKPGPPG SQGESGRPGPPGPSGPRGQPGVMGFPGPKGNDGAPGK NGERGGPGGPGLP GPAGKNGETGPQGPPGPTGPAGDKGDSGPPGPQGLQGI PGTGGPPGENGK PGEPGPKGEVGAPGAPGGKGDSGAPGERGPPGTAGIPG ARGGAGPPGPEG GKGPAGPPGPPGASGSPGLQGMPGERGGPGSPGPKGE

KGEPGGAGADGVP
GKDGPRGPAGPIGPPGPAGQPGDKGEGGSPGLPGIAGP
RGGPGERGEHGP
PGPAGFPGAPGQNGEPGAKGERGAPGEKGEGGPPGPA
GPTGSSGPAGPPG
PQGVKGERGSPGGPGTAGFPGGRGLPGPPGNNGNPGP
PGPSGAPGKDGPP
GPAGNSGSPGNPGIAGPKGDAGQPGEKGPPGAQGPPG
SPGPLGIAGLTGA
RGLAGPPGMPGPRGSPGPQGIKGESGKPGASGHNGERG
PPGPQGLPGQPG
TAGEPGRDGNPGSDGQPGRDGSPGGKGDRGENGSPGA
PGAPGHPGPPGPV
GPSGKSGDRGETGPAGPSGAPGPAGARGAPGPQGPRG
DKGETGERGSNGI
KGHRGFPGNPGPPGSPGAAGHQGAIGSPGPAGPRGPVG
PHGPPGKDGTSG
HPGPIGPPGPRGNRGERGSEGSPGHPGQPGPPGPPGAP
GPCCGGGAAAIA GVGGEKSGGFSPYYGVDHHHHHH

Predicted molecular weight	97 kDa including tags
Amino acids	155 to 1219
Tags	His tag C-Terminus
Additional sequence information	This product is the mature full length protein from aa 155 to 1219. The signal peptide and propeptides are not included.

Specifications

Our **Abpromise guarantee** covers the use of **ab196093** in the following tested applications.

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

Applications	SDS-PAGE HPLC
Form	Liquid

Preparation and Storage

Stability and Storage	Shipped on Dry Ice. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle. pH: 4.50 Constituents: 0.87% Sodium chloride, 0.16% Sodium acetate

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]. EDS 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.