

Datasheet for ABIN3091847

COL3A1 Protein (AA 154-1221) (His tag)



Overview

Quantity:	1 mg
Target:	COL3A1
Protein Characteristics:	AA 154-1221
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This COL3A1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:

QYDSYDVKSG VAVGGLAGYP GPAGPPGPPG PPGTSGHPGS PGSPGYQGPP GEPGQAGPSG
PPGPPGAIGP SGPAGKDGES GRPGRPGERG LPGPPGIKGP AGIPGFPGMK GHRGFDGRNG
EKGETGAPGL KGENGLPGEN GAPGPMGPRG APGERGRPGL PGAAGARGND GARGSDGQPG
PPGPPGTAGF PGSPGAKGEV GPAGSPGSNG APGQRGEPGP QGHAGAQGPP GPPGINGSPG
GKGEMGPAGI PGAPGLMGAR GPPGPAGANG APGLRGGAGE PGKNGAKGEP GPRGERGEAG
IPGVPGAKGE DGKDGSPGEP GANGLPGAAG ERGAPGFRGP AGPNGIPGEK GPAGERGAPG
PAGPRGAAGE PGRDGVPGGP GMRGMPGSPG GPGSDGKPGP PGSQGESGRP GPPGPSGPRG
QPGVMGFPGP KGNDGAPGKN GERGGPGGPG PQGPPGKNGE TGPQGPPGPT GPGGDKGDTG
PPGPQGLQGL PGTGGPPGEN GKPGEPGPKG DAGAPGAPGG KGDAGAPGER GPPGLAGAPG
LRGGAGPPGP EGGKGAAGPP GPPGAAGTPG LQGMPGERGG LGSPGPKGDK GEPGGPGADG
VPGKDGPRGP TGPIGPPGPA GQPGDKGEGG APGLPGIAGP RGSPGERGET GPPGPAGFPG
APGONGEPGG KGERGAPGEK GEGGPPGVAG PPGGSGPAGP PGPOGVKGER GSPGGPGAAG

FPGARGLPGP PGSNGNPGPP GPSGSPGKDG PPGPAGNTGA PGSPGVSGPK GDAGQPGEKG SPGAQGPPGA PGPLGIAGIT GARGLAGPPG MPGPRGSPGP QGVKGESGKP GANGLSGERG PPGPQGLPGL AGTAGEPGRD GNPGSDGLPG RDGSPGGKGD RGENGSPGAP GAPGHPGPPG PVGPAGKSGD RGESGPAGPA GAPGPAGSRG APGPQGPRGD KGETGERGAA GIKGHRGFPG NPGAPGSPGP AGQQGAIGSP GPAGPRGPVG PSGPPGKDGT SGHPGPIGPP GPRGNRGERG SEGSPGHPGQ PGPPGPPGAP GPCCGGVGAA AIAGIGGEKA GGFAPYYG

Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.

Characteristics:

- Made in Germany from design to production by highly experienced protein experts.
- Human COL3A1 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered. The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

- 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
- Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Product Details	
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 μm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade
Target Details	
Target:	COL3A1
Alternative Name:	COL3A1 (COL3A1 Products)
Background:	Collagen type III occurs in most soft connective tissues along with type I collagen. Involved in regulation of cortical development. Is the major ligand of ADGRG1 in the developing brain and binding to ADGRG1 inhibits neuronal migration and activates the RhoA pathway by coupling ADGRG1 to GNA13 and possibly GNA12.
Molecular Weight:	96.2 kDa Including tag.
UniProt:	P02461
Pathways:	Autophagy, Growth Factor Binding
Application Details	
Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a gurantee though.
Comment:	In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.

Avoid repeated freeze-thaw cycles.

Handling Advice:

Handling

Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)