

Recombinant Rat CO3A1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52277

Size: 10ug, 100ug

Protein Name: Collagen alpha-1(III) chain

Synonym: Col3a1

UniProt ID: P13941

UniProt Link: www.uniprot.org/uniprotkb/P13941/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 1463 AA

Molecular Weight: 139 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MMSFVQCGTWFLLTLLHPSLILAQQSNVDELGCNYLGQSYESRDVWKPEPCQICVCDSGSVLCDDI
MCDDEPLDCPNPEIPFGECCAICPQPSTPAPVIPDGNRPQGPKGDPGPPGIPGRNGDPGLPGQPGL
PGPPGSPGICESCPTGGQNYSPQFDSYDVKSGVGGMGGYPGPAGPPGPPGPPGSSGHPGSPGS
PGYQGPPGEPGQAGPAGPPGPPGAIGPSGPAGKDGESGRPGRPGERGLPGPPGIKGPAGIPGFP
GMKGHRGFDGRNGEKGETGAPGLKGENGLPGDNGAPGPMGPRGAPGERGRPLPGAAGARGN
DGARGSDGQPGPPGPPGTAGFPSPGAKGEVGPAGSPGNSGSPGQRGEPGPQGHAGAQQGPPG
PPGNNGSPGGKGEMGPAGIPGAPGLLGARGPPGPAGANGAPGQRGSPGEPGKNGAKGEPGARG
ERGEAGSPGIPGPKGEDGKDGSPPGEPGANGVPGNPGERGAPGFRGPAGPNGAPGEKGPAGERG
GPGPAGPRGVAGEPGRDGTGGPGIRGMPGSPGGPGNDGKPGPPGSQGESGRPGPPGPSGPR
GQPGVMGFPGPKGNDGAPGKNGERGPGGPGPLPGPAGKNGETGPQGGPPGPTGAPGDKGDAGP
PGPQGLQGIPGTSGPPGENGKPGEPGPKGEAGAPGVPGGKGDSGAPGERGPPGTAGTPGLRGG
AGPPGPEGGKGAPAGPPGPPGTSGPPGLQGMPGERGGPGSPGPKGEKGEPPGAGADGVPGKDG
PRGPAGPIGPPGPAGQPGDKGEGGAPGLPGIAGPRGGPGERGEHGPAGFPAGPQNGEPG
AKGERGAPGEKGEPPGAAGPPGGSGPAGPPGPQGVKGERGSPGGPGAAGFPGGRGLPGPP
GNNGNPGPPGPSGAPGKDGPPGPAGNSGSPGNPGVAGPKGDAGQPGEKGGPPGAQQGPPGSPGP
LGIAGLTGARGLAGPPGMPGRGSPGPQGIKGESGKPGASGHNGERGPPGPQGLPGQPGTAGEP
GRDGNPGSDGQPGRDGSPGGKGDRENGSPGAPGAPGHPGPPGPVGPSPGKNGDRGETGPAGP
SGAPGPAGARGAPGPQGPGRGDKGETGERGSGNGIKGHRGFPGNPGPPGSPGAAGHQGAVGSPGP
AGPRGPVGPHGPPGKDGSSGHPGPIGPPGPRGNRGERGSESGPHPGQPGPPGPPGAPGPCCG



GGAAIAGVGGEKSGGFSPYYGDDPMDFKINTEEIMSSLKSVNGQIESLISPDGSRKNPARNCRDLKF
CHPELKSGEYWVDPNQGCKMDAIKVFCNMETGETCINASPMTVPRKHWWTDAGAEKKHVWFGES
MNGGFQFSYGNPDLPEDVLDVQLAFLRLLSSRASQNITYHCKNSIAYMDQANGNVKKSLKLMGSNE
GEFKAEGNSKFTYTVLEDGCTKHTGEWSKTVFEYQTRKAMRLPIIDIAPYDIGGPDQEFQVDIGPVCF
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3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Collagen alpha-1(III) chain produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: 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 (By similarity).

Subcellular Localization: Secreted, extracellular space, extracellular matrix .

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.