

Recombinant Human FINC Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50335

Size: 10ug, 100ug

Protein Name: Fibronectin (FN) (Cold-insoluble globulin) (CIG) [Cleaved into: Anastellin; Ugl-Y1; Ugl-Y2; Ugl-Y3]

Synonym: FN1, FN

UniProt ID: P02751

UniProt Link: www.uniprot.org/uniprotkb/P02751/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 2477 AA

Molecular Weight: 272 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MLRGP GPGLLLLAVQCLGTAVPSTGASKSKRQAQQMVQPQSPVAVSQSKPGCYDNGKHQINQQ
WERTYLGNALVCTCYGGSRGFNCEKPEAEETCFDKYTGNTYRVGDTYERPKDSMIWDCTCIGAG
RGRISCTIANRCHEGGQSYKIGDTWRRPHETGGYMLECVCLGNGKGEWTKPIAEKCFDHAAGTSY
VVGETWEKPYQGWMMVDCTCLGEGSGRITCTSRNRCNDQDTRTSYRIGDTWSKKDNRGNLLQCI
CTGNGRGEWK CERHTSVQTTSSGSGPFTDVRAAVYQPQPHPQPPPYGHCVTDSGVVYSVGMQW
LKTQGNKQMLCTCLGNGVSCQETAVTQTYGGNSNGEPCVLPFTYNGRTFYSCCTTEGRQDGHLC
STTSNYEQDQKYSFCTDHTVLVQTRGGNSNGALCHFPFLYNNHNYTDCTSEGRD NMKWC GTTQ
NYDADQKFGFCPMAAHEEICTTNEGV MYRIGDQWDKQHDMGHMMRCTCVGNRGEWTCIAYSQL
RDQCIVDDITYNVNDTFHKRHEEGHMLNCTCFGQGRGRWKCDPVDQCQDSETGTFYQIGDSWEKY
VHGVRYQCYCYGRGIGEWHCQPLQTPSSSGPVEVFITETPSQPN SHPIQWNAPQPSHISKYILRW
RPKNSVGRWKEATIPGHLNSYTIKGLKPGVVYEGQLISIQQYGHQEVTRFDFTTTSTSTPVTSTNTVTG
ETTPFSPLVATSESVTEITASSFVSWVSASDTVSGFRVEYELSEEGDEPQYLDLPSTATSVNIPDLL
PGRKYIVNVYQISEDGEQSLILSTSQTAPDAPPD TTVDQVDDTSIVVRWSRPQAPITGYRIVYSPSV
EGSSTELNLPETANSVTLSDLQPGVQYNITIYAVEENQESTPVVIQQUETTGTTPRSDTVPSPRDLQFVE
VTDVKVTIMWTPPESAVTGYRVDVIPVNLPGEHGQRLPISRNTFAEVTGLSPGVTYFFKVFVAVSHGR
ESKPLTAQQTTKLDAPTNLQFVNETDSTVLVRWTPPRAQITGYRLTVGLTRRGQPRQYNVGPSVSK
YPLRNLQPASEYTVSLVAIKGNQESPKATGVFTTLQPGSSIPPYNTEVTETTIVITWTPAPRIGFKLGV
RPSQGG EAPREVTSDSGSIVVSGLTGPGVEYVYTIQVLRD GQERDAPIVNKVVTPLSPPTNLHLEANP



DTGVLTVSWERSTTPDITGYRITTTPTNGQQGNSLEEVVHADQSSCTFDNLSPGLEYNVSVYTVKDD
KESVPISDTIPEVPQLTDLFSVDITDSSIGLRWTPLNSSTIIGYRITVVAAGEGIPIFEDFVDSSVGYTV
TGLEPGIDYDISVITLINGGESAPTTLTQQTAVPPPTDLRFTNIGPDTMRVTWAPPPSIDLTNFLVRYSP
VKNEEDVAELSISPSDNAVVLTNLLPGTEYVVSVSVEQHESTPLRGRQKTGLDSPTGIDFSDITAN
SFTVHWIAPRATITGYRIRHHEHFSGRPREDRVPHSRNSITLTNLTPGTEYVVSIVALNGREESPLLI
GQQSTVSDVPRDLEVVAATPTSLLSWDAPAVTVRYRITYGETGGNSPVQEFTVPGSKSTATISGL
KPGVDYTITVYAVTGRGDSPASSKPISINYRTEIDKPSQMQVTDVQDNSISVKWLPSSSPVTGYRVTT
TPKNGPGPTKTKTAGPDQTEMTIEGLQPTVEYVVSVAQNPSGESQPLVQTAVTNIDRPKGLAFTDV
DVDSIKIAWESPQQQVSRVRYTYSSPEDGIHELFPAPDGEEDTAELQGLRPGSEYTVSVVALHDDM
ESQPLIGTQSTAIPAPTDLKFQVTPPTSLSAQWTPPNVQLTGYRVRVTPKEKTGPMKEINLAPDSSSV
VVSGLMVATKYEVSVYALKDTLTSRPAQGVVTTLENVSPRRARVTDATETTITISWRTKTETITGFQ
VDAVPANGQTPIQRTIKPDVRSYTITGLQPGTDYKIYLYTLNDNARSSPVVIDASTAIDAPSNLRLATT
PNSLLVSWQPPRARITGYIIKYEKPGSPPREVVPRPRPGVTEATITGLEPGTEYTIYVIALKNNQKSEP
LIGRKKTDLPQLVTLPHPNLHGPEILDVPSTVQKTPFVTHPGYDTGNGIQLPGTSGQQPSVGQQMI
FEEHGFRRTPPTTATPIRHRPRPYPPNVGEEIQIGHIPREDVDYHLYPHGPGLNPNASTGQEALSQ
TTISWAPFQDTSEYIISCHPVGTDEEPLQFRVPGTSTSATLTGLTRGATYNVIVEALKDQQRHKVREE
VVTVGNSVNEGLNQPTDDSCFDPYTVSHYAVGDEWERMSESGFKLLCQCLGFGSGHFRCDSSRW
CHDNGVNYKIGEKWDRQGENGQMMSCCTCLGNGKGEFKCDPHEATCYDDGKTYHVGEQWQKEYL
GAICSCTCFGGQRGWRCDNCRRPGGEPSPGTTGQSYNQYSQRYHQRTNTNVNCPICFMPLDV
QADREDSRE

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 Fibronectin (FN) (Cold-insoluble globulin) (CIG) [Cleaved into: Anastellin; Ugl-Y1; Ugl-Y2; Ugl-Y3] 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: Fibronectins bind cell surfaces and various compounds including collagen, fibrin, heparin, DNA, and actin (PubMed:3024962, PubMed:3593230, PubMed:3900070, PubMed:7989369). Fibronectins are involved in cell adhesion, cell motility, opsonization, wound healing, and maintenance of cell shape (PubMed:3024962, PubMed:3593230, PubMed:3900070, PubMed:7989369). Involved in osteoblast compaction through the fibronectin fibrillogenesis cell-mediated matrix assembly process, essential for osteoblast mineralization (By similarity). Participates in the regulation of type I collagen deposition by osteoblasts (By similarity). Acts as a ligand for the LILRB4 receptor, inhibiting FCGR1A/CD64-mediated monocyte activation (PubMed:34089617).; [Anastellin]: Binds fibronectin and induces fibril formation. This fibronectin polymer, named superfibronectin, exhibits enhanced adhesive properties. Both anastellin and superfibronectin inhibit tumor growth, angiogenesis and metastasis. Anastellin activates p38 MAPK and inhibits lysophospholipid signaling.; Secreted by contracting muscle, induces liver autophagy, a degradative

pathway for nutrient mobilization and damage removal, and systemic insulin sensitization via hepatic ITGA5:ITGB1 integrin receptor signaling.

Subcellular Localization: Secreted, extracellular space, extracellular matrix . Secreted .

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.