

Recombinant Rat PCSK5 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52357

Size: 10ug, 100ug

Protein Name: Proprotein convertase subtilisin/kexin type 5 (EC 3.4.21.-) (Proprotein convertase 5) (PC5) (Proprotein convertase 6) (PC6) (Subtilisin/kexin-like protease PC5) (rPC5)

Synonym: Pcsk5

UniProt ID: P41413

UniProt Link: www.uniprot.org/uniprotkb/P41413/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 1809 AA

Molecular Weight: 201 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MDWGWGSRCCRPGRRDLLCVLALLAGCLLPVCRTRVYTNHWAVKIAGGFAEADRIASKYGFINVGG
IGALKDYYHFYHSRTIKRSVLSSRGTHSFISMEPKVEWIIQQVVKRTRKRDYDL SRAQSTYFNDPKW
PSMWYMHCSDNTHPCQSDMNIEGAWKRGYTGKNIVVTILDDGIERTHPDLMQNYDALASCDVNGN
DLDPMPRYDASNENKHGTRCAGEVAATANSHCTVGIAFNAKIGGVRMLDGDVTDMVEAKSVSYN
PQHVIHYSASWGPDDDGKTVDGPAPLTRQAFENGVRMGRRLGSLVFWASGNNGGRSKDHCSCD
GYTNSIYTISISSTAESGKKPWYLEECSSTLATTYSSGESYDKKIITDLRQRCTDNHTGTSASAPMAA
GIIALALEANPFLTWRDVQHIVVRTSRAGHLNANDWKTNAAGFKVSHLYGFGLMDAEAMVMEAEKW
TTVPQQHVCEVESTDRQIKTIRPNSAVRSIYKASGCSNPNHHVNYLEHVVRITITHPRRGDLAIYLS
PSGTRSQLLANRLFDHSMEGFKNWEFMTIHCWGERAAGDWVLEVYDTPSQLRNFKTPGKLKEWSL
VLYGTSVQPYSPNTNEFPKVERFRYSRVEDPTDDYGAEDYAGPCDPECSEVGCDGPGPDHCTDCLH
YHYKLNNTRICVSSCPPGHFHADKKRCRCAPNCESCFGSHADQCLSKYGYFLNEETSSCVAQ
CPEGSYQDIKKNICGKCSNCKTCTGFHNCTECKGGLSLQGSRCVTCEDGQFFSGHDQCQPCHRF
CATCAGAGADGCINCTEGYVMEEGRCVQSCSVSYLDHSLEGGYKSKRCNDNSCLTCNGPGFKN
CSSCPSGYLLDLGMCQMGAICKDGEYIDEQGHQCICDASCAKCWGPTQDDCISCPITRVFDDGRCV
MNCPSWKFEKKQCHPHHTCQGCQSGSPNCTSCKAGEFQDSEYGECMPCEEGCVGCTVDDP
GACTSCATGYMFERHCYKACPEKTFGEKWECKACGTNCGSCDQHECYWCEEFFLSSGSCVQD
CDPGFYGDQELGECKPCHRACETCTGLGYNQCSSCEGLQLWHGTCIWPTWPHVEGKVVWNEAVP



TEKPSLVRSLPQDRRKWKVQIKRDATRQYQPCHSSCKTCNGSLCTSCPAAGTYLWLQACVPSCPQG
TWLSVRSSSCEKCAEGCASCSDGDDLCQRCLSQPSNTLLHEGRCYHSCPEGFYAKDGVCEHCSSP
CKTCKGNATSCHSCEGDFVLDHGVWCWETCPEKHVAVEGVCKKHCPERCQDCIHEKTCKECMPDFFL
YNDMCHHSCPKNFYPMRQCVPCHKNCLGCNGPKEDDCKACADTSKVLHNGLCCLDECPKGTYKD
EVNDECRDCPECLICSSAWTCLTCREGFTVVQDVCTAPKECAAIEYWDVGSHRCPCHRKCSRC
SGPSENQCYTCPRETFLLNTTCVKECEPEGYHTDKDSHQCVPCCHSSCRTCEGPHSMQCLSCRPGW
FQLGKECLLQCRDGYGEGSTSGRCEKCDKCKTCRGPQPTDCQSCDTFFFLRSKGQCHLACPEH
YYADQHAQTCECHPTCDKCSGKEAWNCLSCVWSYHLLKGICTPECIVGEYRDGKGENFNCKKCH
ESCMECKGPGSKNCTGCSAGLLLQMDDSRCLRCCNASHPHRSQDCCDCQSSTDECILPASDDTVF
HEHTKTALLVTSGAMLLLLLGAADVVRKSRSPVAKGRYEKLAEPVSYSSYSSYLDDEDQVIEYR
DRDYDEDEDDIVYMGQDGTVYRKFKYGLLDEAEDDELEYDDESYSYQ

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 Proprotein convertase subtilisin/kexin type 5 (EC 3.4.21.-) (Proprotein convertase 5) (PC5) (Proprotein convertase 6) (PC6) (Subtilisin/kexin-like protease PC5) (rPC5) 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: Serine endoprotease that processes various proproteins by cleavage at paired basic amino acids, recognizing the RXXX[KR]R consensus motif. Likely functions in the constitutive and regulated secretory pathways. Plays an essential role in pregnancy establishment by proteolytic activation of a number of important factors such as BMP2, CALD1 and alpha-integrins. May be responsible for the maturation of gastrointestinal peptides. May be involved in the cellular proliferation of adrenal cortex via the activation of growth factors.

Subcellular Localization: [Isoform PC5A]: Secreted . Note=Secreted through the regulated secretory pathway.; [Isoform PC5B]: Endomembrane system ; Single-pass type I membrane protein . Note=Type I membrane protein localized to a paranuclear post-Golgi network compartment in communication with early endosomes.

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.