

Recombinant Human ADA17 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50013

Size: 10ug, 100ug

Protein Name: Disintegrin and metalloproteinase domain-containing protein 17 (ADAM 17) (EC 3.4.24.86) (Snake venom-like protease) (TNF-alpha convertase) (TNF-alpha-converting enzyme) (CD antigen CD156b)

Synonym: ADAM17, CSVP, TACE

UniProt ID: P78536

UniProt Link: www.uniprot.org/uniprotkb/P78536/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 824 AA

Molecular Weight: 93 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MRQSLLFLTSVVPFVLAPRPPDDPGFGPHQRLEKLDLSLSDYDILSLSNIIQQHHSVRKRDLQTSTHVET
LLTFSALKRHFVLYLTSSTERFSQNFVVDGKNESEYTVKWQDFFTGHVVGEPSRVLAHIRDDD
VIIRINTDGAEYNIEPLWRFVNDTKDKRMLVYKSEDIKNVSRLQSPKVCGYLKVDNEELLPKGLVDRE
PPEELVHRVKRRADPDPMKNTCKLLVADHRFYRYMGRGEESTTTNYLIELIDRVDDIYRNTSWDNA
GFKGYGIEQIRILKSPQEVKPGKEKHYNMAKSYPNEEKDAWDVKMLLEQFSFDIAEEASKVCLAHLF
TYQDFDMGTLGLAYVGSPRANSHGGVCPKAYYSPVGKKNIYLNLSGLTSTKNYGKTILTKEADLVTTTH
ELGHNFGAEHDPDGLAEAPNEDQGGKYVMYPIAVSGDHENNMFSNCSKQSIYKTIESKAQECFQ
ERSNKVCGNSRVDEGEEDCPGIMYLNNDTCCNSDCTLKEGVQCSDRNSPCKKNCQFETAQKKCQ
EAINATCKGVS YCTGNSSECPPPGNAEDDTVCLDLGKCKDGKCIPFCEREQQLESCACNETDNSCK
VCCRDLSGRCVPYVDAEQKNLFLRKGKPCVTGFCDMNGKCEKRVQDVIERFWDFIDQLSINTFGKF
LADNIVGSVLVFSILFWIPFSILVHCVDKLDKQYESLSLFHPSNVEMLSMDSASVRIIKPFPAPQTPG
RLQPAPVIPSAPAAPKLDHQRM DTIQEDPSTD SHMDE DGF EKDPFPNSSTA AKSFEDLTDHPVTRSE
KAASF LQRQNRVDSKETEC

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 Disintegrin and metalloproteinase domain-containing protein 17 (ADAM 17) (EC 3.4.24.86) (Snake venom-like protease) (TNF-alpha convertase) (TNF-alpha-converting enzyme) (CD antigen CD156b) 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: Transmembrane metalloprotease which mediates the ectodomain shedding of a myriad of transmembrane proteins including adhesion proteins, growth factor precursors and cytokines important for inflammation and immunity (PubMed:24226769, PubMed:24227843, PubMed:28060820, PubMed:28923481, PubMed:38771644). Cleaves the membrane-bound precursor of TNF to its mature soluble form (PubMed:36078095, PubMed:9034191). Responsible for the proteolytic release of soluble JAM3 from endothelial cells surface (PubMed:20592283). Responsible for the proteolytic release of several other cell-surface proteins, including p75 TNF-receptor, interleukin 1 receptor type II, p55 TNF-receptor, transforming growth factor-alpha, L-selectin, growth hormone receptor, MUC1 and the amyloid precursor protein (PubMed:12441351). Acts as an activator of Notch pathway by mediating cleavage of Notch, generating the membrane-associated intermediate fragment called Notch extracellular truncation (NEXT) (PubMed:24226769, PubMed:38771644). Plays a role in the proteolytic processing of ACE2 (PubMed:24227843). Plays a role in hemostasis through shedding of GP1BA, the platelet glycoprotein Ib alpha chain (By similarity). Mediates the proteolytic cleavage of LAG3, leading to release the secreted form of LAG3 (By similarity). Mediates the proteolytic cleavage of IL6R, leading to the release of secreted form of IL6R (PubMed:26876177, PubMed:28060820). Mediates the proteolytic cleavage and shedding of FCGR3A upon NK cell stimulation, a mechanism that allows for increased NK cell motility and detachment from opsonized target cells. Cleaves TREM2, resulting in shedding of the TREM2 ectodomain (PubMed:28923481).

Subcellular Localization: Cell membrane ; Single-pass type I membrane protein.

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.