

Recombinant Human ADIPO Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50018

Size: 10ug, 100ug

Protein Name: Adiponectin (30 kDa adipocyte complement-related protein) (Adipocyte complement-related 30 kDa protein) (ACRP30) (Adipocyte, C1q and collagen domain-containing protein) (Adipose most abundant gene transcript 1 protein) (apM-1) (Gelatin-binding protein)

Synonym: ADIPOQ, ACDC, ACRP30, APM1, GBP28

UniProt ID: Q15848

UniProt Link: www.uniprot.org/uniprotkb/Q15848/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 244 AA

Molecular Weight: 26 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MLLLGAVLLLLALPGHDQETTTQGPVLLPLPKGACTGWMAGIPGHPGHNGAPGRDGRDGTGPGEK
GEKGDPLIGPKGDIGETGVPGAEGPRGFPGIQGRKGEPGEGAYVYRSAFSVGLETYVTIPNMPIRF
TKIFYNQNNHYDGSTGKFHCNIPGLYYFAYHITVYMKDVKVSLFKKDKAMLFTYDQYQENNVDQASG
SVLLHLEVGDQVWLQVYGEGERNGLYADNDNDSTFTGFLLYHDTN

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 Adiponectin (30 kDa adipocyte complement-related protein) (Adipocyte complement-related 30 kDa protein) (ACRP30) (Adipocyte, C1q and collagen domain-containing protein) (Adipose most abundant gene transcript 1 protein) (apM-1) (Gelatin-binding protein) 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: Important adipokine involved in the control of fat metabolism and insulin sensitivity upon binding to its receptors ADIPOR1 or ADIPOR2, with direct anti-diabetic effect. Also has anti-atherogenic and anti-inflammatory activities (By similarity). Stimulates AMPK phosphorylation and activation in the liver and the skeletal muscle, enhancing glucose utilization and fatty-acid combustion (By similarity). Antagonizes TNF by negatively regulating its expression in various tissues such as liver and macrophages, and also by counteracting its effects. Inhibits endothelial NF-kappa-B signaling through a cAMP-dependent pathway (PubMed:10982546). May play a role in cell growth, angiogenesis and tissue remodeling by binding and sequestering various growth factors with distinct binding affinities, depending on the type of complex, LMW, MMW or HMW (By similarity).

Subcellular Localization: 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.