

Synonym

ADIPOQ, Adiponectin, ACDC, ACRP30, APM1, GBP28

Source

Human ADIPOQ, Fc Tag (ADQ-H5250) is expressed from human 293 cells (HEK293). It contains AA Glu 19 - Asn 244 (Accession # NP_001171271).

Predicted N-terminus: Glu 19

Molecular Characterization

ADIPOQ(Glu 19 - Asn 244) NP_001171271	Fc(Pro 100 - Lys 330) P01857
--	---------------------------------

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 51.2 kDa. The protein migrates as 54-58 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>92% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM Glycine, pH7.5. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

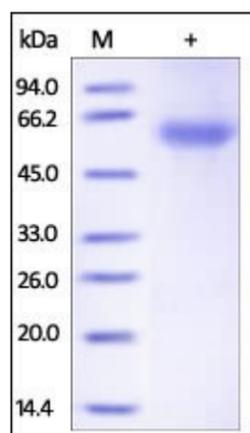
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

Human ADIPOQ, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 92%.

Background

Adiponectin is also referred to as GBP-28, APM1, ADIPOQ, ACDC and Acrp30, is a secreted protein which contains one C1q domain (commonly called the globular domain) and onecollagen-like domain. Adiponectin / ADIPOQ is synthesized exclusively by adipocytes and secreted into plasma. ADIPOQ is important adipokine involved in the control of fat metabolism and insulin sensitivity, with direct anti-diabetic, anti-atherogenic and anti-inflammatory activities. Adiponectin antagonizes TNF-alpha by negatively regulating its expression in various tissues such as liver and macrophages, and also by counteracting its effects. Acrp30 Inhibits endothelial NF-kappa-B signaling through a cAMP-dependent pathway and 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.

References

- (1) [Nakano Y., et al., 1996, J. Biochem. 120:803-812.](#)
- (2) [Yamauchi T., et al., 2001, Nat. Med. 7:941-946.](#)
- (3) [Richards A.A., et al., 2006, Mol. Endocrinol. 20:1673-1687.](#)

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.