

Datasheet

Adiponectin Trimeric

Human Recombinant

Product	Description	Catalogue-No.	Size
Acrp30 Tri	Adiponectin trimeric, human recombinant	CB-2800010 CB-2800011	2 µg 10 µg

Product description

Synonyms: Acrp30, AdipoQ, GBP-28, APM-1, ACDC

Adiponectin is a hormone exclusively expressed in adipose tissue. Many studies demonstrate that adiponectin has direct anti-diabetic, anti-atherogenic and anti-inflammatory functions. APM-1 can increase insulin sensitivity of skeletal muscle, attenuate hepatic lipogenesis and gluconeogenesis, regulate NO production in endothelial cells, inhibit proliferation of smooth muscle cells and prevent lipid accumulation of macrophage cells. In the circulation, adiponectin is present as three different oligomeric complexes, including the high molecular weight (HMW), the middle molecular weight (MMW, also called hexamer) and low molecular weight (LMW, also called trimer) forms. Different oligomeric complex of adiponectin activates different signaling pathways and exerts distinct functions. Adiponectin (Acrp30 Tri) human trimeric form was expressed in HEK293 cells. The Cysteine 39 was replaced with Alanine (C39A). Adiponectin C39A can only form a trimer, but not a hexamer or a HMW form.

Solubility and storage conditions

Add deionized water to a working volume of 0.5 mg/ml and let the lyophilized pellet dissolve completely. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in cell culture.

Store lyophilized adiponectin at -20° C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 2-8° C for a limited period of time; it does not show any change after two weeks at 2-8° C

Composition

Filtered white lyophilized (freeze-dried) powder. Filtered (0.4 µm) and lyophilized from 0.5 mg/ml in 0.05 M phosphate buffer, 0.05 M NaCl, pH 7.4.

Amino acid sequence: ETTTQGPGVL LPLPKGAATG WMAGIPGHPG HNGAPGRDGR
 DGTPGEKGEK GDPGLIGPKG DIGETGVPGA EGPRGFPGIQ GRKGEPGEGA YVYRSAFEVSG
 LETYVTIPNM PIRFTKIFYN QQNHVDGSG KFHCNIPGLY YFAYHIVYMK DVKVSFLFKKD
 KAMLFTYDQY QENNVDAQSG SVLLHLEVGD QVWLQVYGEER ERNGLYADND NDSTFTGFL
 YHDTNDYKDD DDK

Purity: > 95% as determined by SDS-PAGE.

Biological activity: ED₅₀ = 3-8.5 µg/ml, as determined by its ability to inhibit EGF-induced proliferation of HASMCs.

Suitability

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY!

Not approved for human or animal diagnostic or therapeutic procedures.

Technical Support

For technical support or questions or please contact your local PAN-Biotech partner or the technical department of PAN-Biotech via email info@pan-biotech.com