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Product Datasheet

Product Name Recombinant Human Adiponectin, Trimeric form

Cata No CB500135

Source HEK293 (Human embryonic kidney cell line)
Synonyms Acrp30, AdipoQ, GBP-28, APM-1, ACDC.

Description

Adiponectin is a hormone exclusively expressed from 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 weigh (MMW, also called trimer) forms 8. Different oligomeric complex of Adiponectin activates different signaling pathways and exerts distinct functions.

Trimeric form of Adiponectin Human trimeric form was expressed in HEK293 cells. The cystenine 39 was replaced with Alanine (C39A) 9. hAd-C39A can only form trimer, but not hexamer or HMW form.

Purity

Greater than 95% as determined by SDS-PAGE.

Formulation

Sterile filtered and lyophilized from 0.5 mg/ml in 0.05

M phosphate buffer, 0.05 M NaCl, pH 7.2.

Solubility

Add 0.2 ml of deionized water and let the lyophilized pellet dissolve completely.

Stability

Store lyophilized Adiponectin at -20°C. Aliquot the product after reconstitution to **avoid repeated freezing/thawing cycles**. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C. The lyophilized AdipoQ remains stable until the expiry date when stored at -20°C.

Sequence

ETTTQGPGVL LPLPKGAATG WMAGIPGHPG
HNGAPGRDGR DGTPGEKGEK GDPGLIGPKG
DIGETGVPGA EGPRGFPGIQ GRKGEPGEGA
YVYRSAFSVG LETYVTIPNM PIRFTKIFYN
QQNHYDGSTG KFHCNIPGLY YFAYHIVYMK
DVKVSLFKKD KAMLFTYDQY QENNVDQASG
SVLLHLEVGD QVWLQVYGEG ERNGLYADND
NDSTFTGFLL YHDTNDYKDD DDK

Application

In vitro, ex vivo and in vivo activity analysis, binding assay et al.