

41010 Recombinant Human Adiponectin (hADPN)

Source:	Expressed in <i>E.coli</i>
Tag:	N-terminal 6xHis
Size:	100µg
Purity:	>95%, determined by SDS-PAGE
Other Names:	Acrp30, apM1, GBP28, adipoQ

Introduction to the Molecule

Adiponectin is a circulating hormone predominantly produced from adipose tissue. Many pharmacological studies demonstrated that this protein possesses potent anti-diabetic, anti-atherogenic and anti-inflammatory functions. Supplement of adiponectin protein can decrease blood glucose, improve insulin sensitivity, alleviate fatty liver and prevent atherosclerosis. Decreased circulating levels of plasma adiponectin (hypoadiponectinaemia) are associated with increased body mass index (BMI), decreased insulin sensitivity, less favorable plasma lipid profiles, increased levels of inflammatory markers and increased risk for the development of type 2 diabetes, hypertension, and coronary heart diseases. Low adiponectin concentrations were found to be predictive of a future reduction in insulin sensitivity and cardiovascular disorders.

Amino Acid Sequence

MSYYHHHHHHDYDIPTTENLYFQGAMGS
ETTTQGPVLLPLPKGACTGWMAGIPGHPGH
NGAPGRDGRDGTPEKGEKGDPLIGPKGDI
GETGVPGAEGPRGFPGIQGRKGEPGEGAYVY
RSAFSVGLETYVTIPNMPIRFTKIFYNQNHVD
GSTGKFHCNIPGLYYFAYHITVYMKDVKVSLF
KKDKAMLFTYDQYQENNVDQASGSVLLHLEV
GDQVWLQVYGEGERNGLYADNDNDSTFTGF
LLYHDTN

Note: **6xhis tag** and **TEV site** are highlighted

Formulation, Reconstitution and Storage

- Lyophilized at 1 mg/mL in NaCl 137mM, KCl 2.7mM, Na₂HPO₄ 10mM, KH₂PO₄ 1.8mM, pH 8.0.
- Add deionized water to prepare a working stock solution of approximately 1 mg/mL and let the lyophilized pellet dissolve completely.
- Store lyophilized protein at -20°C. Aliquot reconstituted protein and store at -80°C. Avoid repeated freezing /thawing cycles.

SDS-PAGE Gel

