

DATASHEET

Version 20181206

Adiponectin, Mouse

Cat. No.: Z03149-1

Size: 1.0 mg

Synonyms: Acrp-30, GBP-28, Apm-1

Description:

Adiponectin is a hormone mainly produced by adipocytes. Adiponectin forms a homotrimer and exists as higher order multimers *in vivo*. The receptors of Adiponectin are seven transmembrane G protein coupled receptors: Receptor 1 is expressed in skeletal muscle and Receptor 2 in liver. Adiponectin receives a lot of attention because of its anti-diabetic, anti-atherosclerotic, and anti-inflammatory properties. Adiponectin increases the expression of molecules involved in fatty acid transport, combustion of fatty acid, and energy dissipation, and increases insulin sensitivity of the body. Decreased levels of Adiponectin are associated with hypertension, cardiovascular diseases, and metabolic syndromes. Therefore, Adiponectin has promising potential as a pharmacological agent. Recombinant mouse Adiponectin (rmAdiponectin) produced in *E. coli* is a single non-glycosylated polypeptide chain containing 227 amino acids. A fully biologically active molecule, rmAdiponectin has a molecular mass of 24.6 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 VTTTEELAPA LVPPPKGTCA GWMAGIPGHP GHNGTPGRDG
00041 RDGTPGEKGE KGDAGLLGPK GETGDVGMTG AEGPRGFPGT
00081 PGRKGEPGEA AYVYRSFVSV GLETRVTVPN VPIRFTKIFY
00121 NQQNHYDGST GKFYCNIPGL YYFSYHITVY MKDKVSLFK
00161 KDKAVLFTYD QYQEKNDVQA SGSVLLHLEV GDQVWLQVYG
00201 DGDHNGLYAD NVNDSTFTGF LLYHDTN
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Source: *E. coli*

Species: Mouse

Biological Activity: ED₅₀ < 5 µg/mL, measured by a cell growth inhibitory assay using M1 cells, corresponding to a specific activity of > 2 × 10² units/mg.

Molecular Weight: 24.6 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O at 100 µg/mL.

Purity: > 95% as analyzed by SDS-PAGE and HPLC.

Endotoxin Level: < 0.2 EU/µg, determined by LAL method.

Storage: Lyophilized recombinant mouse Adiponectin (rmAdiponectin) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rmAdiponectin remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.