

# **Product Datasheet**

# 42011. Recombinant Mouse Adiponectin with Flag Tag

Type: Recombinant Cat. No.: 42011
Tag: Flag Size: 0.1 mg
Source: HEK293 Purity: >98%
Other names: Acrp30, GBP28, AdipoQ Species: Mouse

#### Introduction

Adiponectin, also known as apM1, Acrp30, GBP28 and adipoQ, 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. The protein is post-translationally modified by hydroxylation and glycosylation, and forms three different oligomeric complexes in the circulation. Many clinical studies demonstrated that plasma adiponectin is an useful biomarker for metabolic syndrome, nonalcoholic steatohepatitis and certain type of cancers. Decreased circulating levels of plasma adiponectin (hypoadiponectinaemia) are associated with increased body mass index (BMI), decreased insulin sensitivity, less favourable 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. Administration of the anti-diabetic drugs thiazolidinediones (TZDs) raises circulating adiponectin levels. In addition, low plasma adiponectin levels are also associated with nonalcoholic steatohepatitis (NASH) and certain types of cancers.

### **Description**

Total 238 AA. Mw: 25.9 kDa (calculated). C-terminal flag-tag, 8 extra AA (highlighted).

## **Amino Acid Sequence**

EDDVTTTEELAPALVPPPKGTCAGWMAGIPGHPGHNGTPGRDGRDGTPGEKGEKGDAGLLGPK GETGDVGMTGAEGPRGFPGTPGRKGEPGEAAYMYRSAFSVGLETRVTVPNVPIRFTKIFYNQQN HYDGSTGKFYCNIPGLYYFSYHITVYMKDVKVSLFKKDKAVLFTYDQYQEKNVDQASGSVLLH LEVGDQVWLQVYGDGDHNGLYADNVNDSTFTGFLLYHDTN**DYKDDDK** 

**Formulation:** Lyophilized in 1 mg/mL in PBS.

**Endotoxin Level:** <0.2 EU/ug.

**Applications:** Cell culture and/or animal studies, ELISA, Western blotting.

**Reconstitution:** Add sterile deionized water to prepare a working stock solution of approximately 1 mg/mL and let the lyophilized pellet dissolve completely.

**Storage:** Store lyophilized protein at  $-20^{\circ}$ C. Aliquot reconstituted protein and store at  $-80^{\circ}$ C. Avoid repeated freezing /thawing cycles.

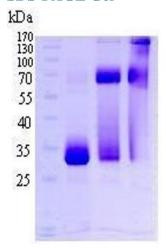
ImmunoDiagnostics Limited. 5/F, 11W, Hong Kong Science Park, Hong Kong Website: www.immunodiagnostics.com.hk.; Email: info@immunodiagnostics.com.hk; Tel: +852 3502 2780



## **Quality Control Test**

BCA to determine quantity of the protein. SDS PAGE to determine purity of the protein.

#### **SDS-PAGE Gel**



12% SDS-PAGE separation of mouse Adiponectin

- 1. My marker
- 2. Reduced and heated sample
- 3. Reduced and non-heated sample
- 4. Non-reduced and non-heated sample