Recombinant Mouse Adiponectin Protein(Trx Tag)

Catalog Number: PDEM100200

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

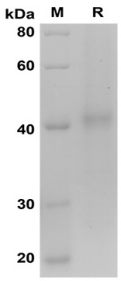
Description

Species	Mouse
Source	E.coli-derived Mouse Adiponectin protein Glu18-Asn247, with an N-terminal Trx
Calculated MW	45.3 kDa
Observed MW	42 kDa
Accession	Q60994
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



SDS-PAGE analysis of Mouse Adiponectin proteins, 2μg/lane of Recombinant Mouse Adiponectin proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 42 KD

Background

Adiponectin (ADIPOQ), or 30 kDa adipocyte complement-related protein (Acrp30) is a protein secreted by adipose tissue, which acts to reduce insulin resistance and atherogenic damage, but it also exerts actions in other tissues. Adiponectin mediates its actions in the periphery mainly via two receptors, AdipoR1 and AdipoR2. Adiponectin influences gonadotropin release, normal pregnancy, and assisted reproduction outcomes. Adiponectin, a beneficial adipokine, represents a major link between obesity and reproduction. Higher levels of adiponectin are associated with improved menstrual function and better outcomes in assisted reproductive cycles. Unlike other adipocytokines produced by adipose tissue, adiponectin appears to have anti-inflammatory, anti-diabetic, and anti-atherogenic properties. Several clinical studies demonstrate the inverse relationship between plasma adiponectin levels and several inflammatory markers including C-reactive protein. Adiponectin attenuates inflammatory responses to multiple stimuli by modulating signaling pathways in a variety of cell types. The anti-inflammatory properties of adiponectin may be a major component of its beneficial effects on cardiovascular and metabolic disorders including atherosclerosis and insulin resistance. Additionally, it is important factor in chronic liver diseases and chronic kidney diseases. Some cancer cell types express adiponectin receptors. Thus Adiponectin may act on tumour cells directly by binding and activating adiponectin receptors and downstream signalling pathways.