

Rev03 Update: Dec,14,2021

DATASHEET

gAcrp30/Adipolean, Mouse

Cat. No.: Z03112

Product Introduction

Species	Mouse
Protein Construction	gAcrp30 [Lys104-Asn247 (Val113Met)] Accession # Q60994
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	< 0.2 EU/µg of protein by gel clotting method
Biological Activity	ED_{50} < 2.0 µg/ml, measured by a cell proliferation assay using M1 cells, corresponding to a specific activity of > 500.0 units/mg.
Expression System	E. coli
Apparent Molecular Weight	~16.5 kDa, on SDS-PAGE under non-reducing conditions.
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH ₂ O up to 100 μ g/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Background

Target Background : gAcrp30 is the globular head domain of Adipocyte complement-related protein of 30 kDa (Acrp30), a cytokine expressed in adipocytes. The name of Acrp30 is bases on its closest homolog, complement factor c1q, and the globular domain of Acrp30 has an unexpected homology with the Tumor Necrosis Factor (TNF) family of cytokines. Acrp30 is recognized by two receptors: adipoR1 expressed in skeletal muscle, and adipoR2 expressed in liver. The expression level of Acrp30 in adipocytes is negatively correlated with body weight and is lower in obese mouse than normal mouse. The globular domain of Acrp30 induces free fatty acid oxidation in muscle and weight reduction in mouse, suggesting its potential use as a pharmacological agent in obesity.

Synonyms: ACDC; APM1



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