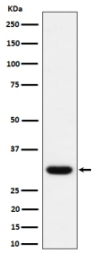
ADIPOQ Antibody / Adiponectin [clone 30A69] (FY12158)

Catalog No.	Formulation	Size
FY12158	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	30A69
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q15848
Applications	Western Blot : 1:500-1:2000 Immunohistochemistry : 1:50-1:200
Limitations	This ADIPOQ antibody is available for research use only.



Western blot analysis of Adiponectin expression in human plasma lysate using ADIPOQ antibody.

Description

ADIPOQ antibody detects adiponectin, an adipocyte-secreted hormone central to energy metabolism, insulin sensitivity, and cardiovascular health. Adiponectin circulates in plasma at high concentrations and exists in several oligomeric forms,

including trimers, hexamers, and high-molecular-weight multimers. Its primary roles involve enhancing fatty acid oxidation, stimulating glucose uptake, and protecting against inflammation and atherosclerosis. Adiponectin exerts its effects through receptors AdipoR1 and AdipoR2, activating AMP-activated protein kinase (AMPK) and peroxisome proliferator-activated receptor alpha (PPARalpha) pathways.

Research using ADIPOQ antibody has revealed broad clinical significance. Low circulating adiponectin levels are strongly associated with obesity, insulin resistance, type 2 diabetes, and metabolic syndrome. Conversely, elevated adiponectin is linked to improved insulin sensitivity and lower risk of cardiovascular disease. This hormone has anti-inflammatory properties, reducing endothelial dysfunction and inhibiting macrophage transformation into foam cells, key processes in atherosclerosis development.

In addition to metabolic disease, adiponectin has roles in cancer and autoimmune disease. Reduced expression of adiponectin or its receptors correlates with increased tumor progression in breast, colon, and prostate cancers. Its anti-proliferative and pro-apoptotic effects suggest protective functions, while dysregulation can contribute to oncogenesis. Autoimmune studies indicate adiponectin modulates immune cell activation, linking it to conditions such as rheumatoid arthritis and systemic lupus erythematosus.

Animal models have further clarified adiponectin's role. Knockout mice lacking ADIPOQ develop insulin resistance and display exaggerated vascular injury responses. Therapeutic strategies to elevate adiponectin or enhance receptor activity are being explored as potential treatments for diabetes, cardiovascular disease, and certain cancers.

Antibodies against adiponectin are validated for western blot, ELISA, immunohistochemistry, and immunofluorescence. These reagents enable detection of adiponectin in serum, tissue, and cultured cells. Clone-based antibodies ensure specificity across multimeric forms, supporting research into endocrine signaling, metabolic disease, and vascular pathology.

NSJ Bioreagents provides this ADIPOQ antibody for studies in metabolism, endocrinology, and cardiovascular biology.

Application Notes

Optimal dilution of the ADIPOQ antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human Adiponectin was used as the immunogen for the ADIPOQ antibody.

Storage

Store the ADIPOQ antibody at -20oC.