

## ADIPOQ Conjugated Antibody

Catalog No: #C38421



Package Size: #C38421-AF350 100ul #C38421-AF405 100ul #C38421-AF488 100ul  
 #C38421-AF555 100ul #C38421-AF594 100ul #C38421-AF647 100ul  
 #C38421-AF680 100ul #C38421-AF750 100ul #C38421-Biotin 100ul

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## Description

Product Name	ADIPOQ Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of total ADIPOQ antibody.
Immunogen Description	Recombinant protein of human ADIPOQ.
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	ACDC; ADPN; APM1; APM-1; GBP28; ACRP30; ADIPQTL1;
Accession No.	Swiss-Prot#:Q15848NCBI Gene ID:9370
Uniprot	Q15848
GeneID	9370;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Calculated MW	28
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

## Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

## Background

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Adiponectin, also termed AdipoQ, Acrp30, apM1 and GBP28, is an adipokine expressed exclusively in brown and white adipocytes (1). It is secreted into the blood and exists in three major forms: a low molecular weight trimer, a medium molecular weight hexamer and a high molecular weight multimer (1). Adiponectin levels are decreased in obese and insulin-resistant mice and humans (2), suggesting that this adipokine is critical to maintain insulin sensitivity. Adiponectin stimulates the phosphorylation of AMPK $\alpha$  at Thr172 and activates AMPK in skeletal muscle (3). It also stimulates glucose uptake in myocytes (3). The block of AMPK activation by a dominant-negative AMPK $\alpha$ 2 isoform inhibits the effect of adiponectin on glucose uptake, indicating that adiponectin stimulates glucose uptake and increases insulin sensitivity through its action on AMPK (3). Adiponectin mutants that are not able to form oligomers larger than trimers have no effect on the AMPK pathway (4). Mutations that render adiponectin unable to form high molecular weight multimers are associated with human diabetes (4), indicating the importance of multimerization for adiponectin activity.

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Note: This product is for in vitro research use only