

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Adiponectin/Acrp30 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) Acrp30 (aa 101-244), recombinant mouse (rm) Acrp30 (aa 111-247), rmAcrp30 (HWM), recombinant rat Acrp30 (aa 1-244), rhC1qTNF1, rmCORS26/C1
Source	Monoclonal Mouse IgG _{2B} Clone # 553517
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Adiponectin/Acrp30 Glu19-Asn244 Accession # Q15848
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Adiponectin, also known as Acrp30, is an adipocyte-derived protein with wide ranging paracrine and endocrine effects on metabolism and inflammation. It is induced during adipocyte differentiation, and its secretion is stimulated by insulin. It promotes adipocyte differentiation, fatty acid catabolism, and insulin sensitivity and is negatively correlated with obesity, type 2 diabetes, and atherogenesis. In this context, Adiponectin is an anti-inflammatory agent, but it exerts pro-inflammatory effects in non-metabolic disorders such as rheumatoid arthritis and inflammatory bowel disease (1-3). Adiponectin interacts with the receptors AdipoR1 and AdipoR2, calreticulin, and Cadherin 13/T-Cadherin, as well as with several growth factors (4-7). Mature human Adiponectin consists of a 60 amino acid (aa) N-terminal collagenous region and a 137 aa C-terminal C1q-like globular domain which can be cleaved by a leukocyte-derived elastase (8, 9). Mature human Adiponectin shares 83% and 85% amino acid (aa) sequence identity with mouse and rat Adiponectin, respectively. Adiponectin associates into trimers that may assemble into medium molecular weight (MMW) hexamers and then into > 300 kDa high molecular weight (HMW) oligomers (10-12). The glycosylation of four hydroxylated lysine residues in the collagenous domain is required for the intracellular formation of HMW complexes (13). The various multimeric forms of Adiponectin exhibit distinct tissue specific and gender specific profiles and activities (12, 14).

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.