

DESCRIPTION

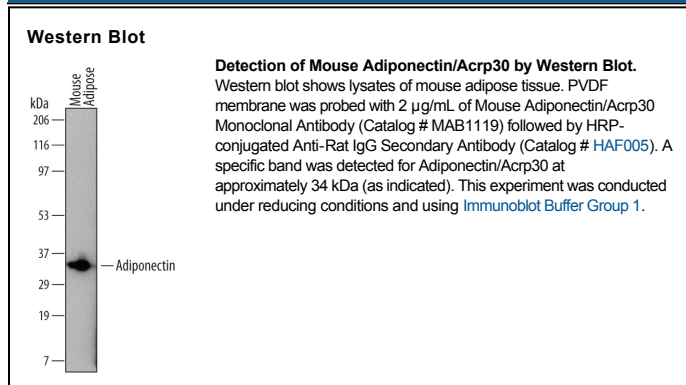
Species Reactivity	Mouse
Specificity	Detects full-length mouse Adiponectin (aa 18-247) in direct ELISAs and Western blots. Shows no cross-reactivity with recombinant human Adiponectin. Does not detect the C-terminal globular domain of mouse Adiponectin (aa 111-247).
Source	Monoclonal Rat IgG _{2A} Clone # 173205
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Adiponectin Glu18-Asn247 Accession # Q60994
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Adiponectin, also known as Acrp30, is an adipocyte-derived protein with wide ranging paracrine and endocrine effects on metabolism and inflammation. 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 nonmetabolic 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 mouse adiponectin consists of a 66 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 - 10). Mature mouse adiponectin shares 83% and 91% amino acid (aa) sequence identity with human 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 (11 - 13). The glycosylation of four hydroxylated lysine residues in the collagenous domain is required for the intracellular formation of HMW complexes (14). The various multimeric forms of adiponectin exhibit distinct tissue specific and gender specific profiles and activities (13, 15).

References:

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