

#2789 Store at -20°C

Adiponectin (C45B10) Rabbit mAb



Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB	H M R	Endogenous	27	Rabbit IgG	#Q15848	9370

Product Usage Information	Application Western Blotting	Dilution 1:1000
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.	
Specificity / Sensitivity	Adiponectin (C45B10) Rabbit mAb detects endogenous levels of total adiponectin protein monomer. It will not detect higher molecular weight forms of adiponectin.	
Source / Purification	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human adiponectin protein.	
Background	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 AMPKα 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 AMPKα2 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.	
Background References	<ol style="list-style-type: none"> Kadowaki, T. et al. (2006) <i>J. Clin. Invest.</i> 116, 1784-1792. Hu, E. et al. (1996) <i>J. Biol. Chem.</i> 271, 10697-10703. Yamauchi, T. et al. (2002) <i>Nat. Med.</i> 8, 1288-1295. Waki, H. et al. (2003) <i>J. Biol. Chem.</i> 278, 40352-40363. 	

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Western Blot Buffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
Applications Key	WB: Western Blotting
Cross-Reactivity Key	H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected
Trademarks and Patents	Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc. U.S. Patent No. 7,429,487, foreign equivalents, and child patents deriving therefrom. All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.
Limited Uses	Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.