

PRODUCT INFORMATION



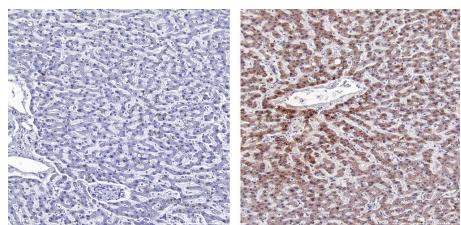
Adropin Monoclonal Antibody (Clone CC1133F5)

Item No. 14117

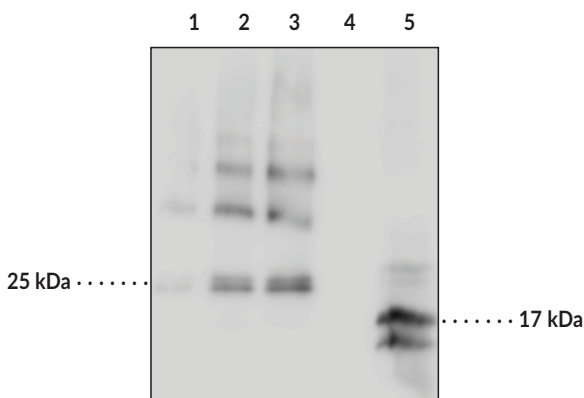
Overview and Properties

Contents:	This vial contains 200 µg of protein G-purified IgG.
Synonym:	Energy Homeostasis-Associated Protein
Immunogen:	Human adropin amino acids 34-76
Species Reactivity:	(+) Human, mouse, and rat; other species not tested
Uniprot No.:	Q6UWT2
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥3 years
Storage Buffer:	PBS, pH 7.2, with 50% glycerol and 0.02% sodium azide
Clone:	CC1133F5
Host:	Mouse
Isotype:	IgG1
Applications:	ELISA. Immunohistochemistry (IHC), and Western blot (WB); the recommended starting dilution for ELISA and WB is 1:500-1,000 and 1:100 for IHC. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Immunohistochemistry analysis of formalin-fixed, paraffin-embedded (FFPE) human liver tissue after heat-induced antigen retrieval in pH 6.0 citrate buffer. After incubation with Adropin Monoclonal Antibody (Clone CC1133F5) (Item No. 14117) at a 1:100 dilution (left panel, secondary alone).



Lane 1: Recombinant SUMO-tagged adropin (10 ng)
Lane 2: Recombinant SUMO-tagged adropin (25 ng)
Lane 3: Recombinant SUMO-tagged adropin (50 ng)
Lane 4: Vector control lysate (HEK293)
Lane 5: Adropin overexpression lysate

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/04/2023

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM

PRODUCT INFORMATION



Description

Adropin is a 76 amino acid secreted peptide expressed in the brain, liver, and plasma and is encoded by the energy homeostasis associated gene.¹ It is highly conserved in mammals, and is involved in glucose homeostasis and lipid metabolism.¹ Plasma levels of adropin decrease with age and have been associated with metabolic disorders such as dyslipidemia and insulin resistance.² Adropin is involved in post-transcriptional activation of eNOS, the up-regulation of VEGFR2, and activation of the ERK1/2 pathway.³ Adropin's involvement in endothelial cells results in increased proliferation and migration, and decreased permeability and apoptosis.³ Western blot detects adropin at 14-17 kDa in an over-expression cell lysate, and at 25 kDa for SUMO-tagged adropin recombinant protein.

References

1. Kumar, K.G., Trevaskis, J.L., Lam, D.D., *et al.* Identification of adropin as a secreted factor linking dietary macronutrient intake with energy homeostasis and lipid metabolism. *Cell Metab.* **8**, 468-481 (2008).
2. Butler, A.A., Tam, C.S., Stanhope, K.L., *et al.* Low circulating adropin concentrations with obesity and aging correlate with risk factors for metabolic disease and increase after gastric bypass surgery in humans. *J. Clin. Endocrinol. Metab.* **97(10)**, 3783-3791 (2012).
3. Lovren, F., Pan, Y., Quan, A., *et al.* Adropin is a novel regulator of endothelial function. *Circulation* **122**, S185-S192 (2010).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM