

Datasheet for ABIN7602757

anti-Acetyl-CoA Carboxylase beta antibody (C-Term)



[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	Acetyl-CoA Carboxylase beta (ACACB)
Binding Specificity:	C-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Acetyl-CoA Carboxylase beta antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Flow Cytometry (FACS)

Product Details

Purpose:	Anti-Acetyl Coenzyme A Carboxylase/ACACB Antibody Picoband®
Immunogen:	A synthetic peptide corresponding to a sequence at the C-terminus of human Acetyl Coenzyme A Carboxylase/ACACB, which shares 64.7% amino acid (aa) sequence identity with mouse Acetyl Coenzyme A Carboxylase/ACACB.
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-Acetyl Coenzyme A Carboxylase/ACACB Antibody Picoband® (ABIN7602757). Tested in Flow Cytometry, IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Product Details

Purification: Immunogen affinity purified.

Target Details

Target: Acetyl-CoA Carboxylase beta (ACACB)

Alternative Name: ACACB ([ACACB Products](#))

Background: Synonyms: Acetyl-CoA carboxylase 2, ACC-beta, Biotin carboxylase, ACACB, ACC2, ACCB
Tissue Specificity: Widely expressed with highest levels in heart, skeletal muscle, liver, adipose tissue, mammary gland, adrenal gland and colon (PubMed:9099716). Isoform 3 is expressed in skeletal muscle, adipose tissue and liver (at protein level) (PubMed:19190759). Isoform 3 is detected at high levels in adipose tissue with lower levels in heart, liver, skeletal muscle and testis (PubMed:19190759).

Background: Acetyl-CoA carboxylase 2 also known as ACC-beta or ACC2 is an enzyme that in humans is encoded by the ACACB gene. It is mapped to 12q24.11. Acetyl-CoA carboxylase (ACC) is a complex multifunctional enzyme system. ACC is a biotin-containing enzyme which catalyzes the carboxylation of acetyl-CoA to malonyl-CoA, the rate-limiting step in fatty acid synthesis. ACC-beta is thought to control fatty acid oxidation by means of the ability of malonyl-CoA to inhibit carnitine-palmitoyl-CoA transferase I, the rate-limiting step in fatty acid uptake and oxidation by mitochondria. ACC-beta may be involved in the regulation of fatty acid oxidation, rather than fatty acid biosynthesis. There is evidence for the presence of two ACC-beta isoforms.

Molecular Weight: 277 kDa

Gene ID: 32

UniProt: [O00763](#)

Pathways: [AMPK Signaling, Ribonucleoside Biosynthetic Process](#)

Application Details

Application Notes: Western blot, 0.25-0.5 µg/mL, Mouse, Rat
Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/mL, Mouse, Rat
Flow Cytometry (Fixed), 1-3 µg/1x10⁶ cells, Human
1. Widmer J, Fassihi KS, Schlichter SC, Wheeler KS, Crute BE, King N, Nutile-McMenemy N, Noll WW, Daniel S, Ha J, Kim KH, Witters LA (June 1996). "Identification of a second human acetyl-CoA carboxylase gene". The Biochemical Journal. 316 (Pt 3) (3): 915-22. 2. Corbett JW, Harwood JH (November 2007). "Inhibitors of mammalian acetyl-CoA carboxylase". Recent

Application Details

Patents on Cardiovascular Drug Discovery. 2 (3): 162-80. 3. Olson DP, Pulinilkunnil T, Cline GW, Shulman GI, Lowell BB (April 2010). "Gene knockout of Acc2 has little effect on body weight, fat mass, or food intake". Proceedings of the National Academy of Sciences of the United States of America. 107 (16): 7598-603.

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na₂HPO₄, 0.05 mg Sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C, -20 °C

Storage Comment: Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.