10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ACACB Antibody (internal region)

Peptide-affinity purified goat antibody
Catalog # AF2572a

Specification

ACACB Antibody (internal region) - Product Information

Application	**EIA**
Primary Accession	O00763
Other Accession	NP_001084.2, 32
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5 mg/ml**
Isotype	**IgG**
Calculated MW	**276541**

ACACB Antibody (internal region) - Additional Information

Gene ID 32

Other Names
Acetyl-CoA carboxylase 2, 6.4.1.2, ACC-beta, Biotin carboxylase, 6.3.4.14, ACACB, ACC2, ACCB

Format
0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ACACB Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

ACACB Antibody (internal region) - Protein Information

Name ACACB (HGNC:85)

Synonyms ACC2, ACCB

Function
Mitochondrial enzyme that catalyzes the carboxylation of acetyl-CoA to malonyl-CoA and plays a central role in fatty acid metabolism (PubMed:16854592, PubMed:19236960, PubMed:19900410, PubMed:20457939, PubMed:<a

href="http://www.uniprot.org/citations/20952656" target="_blank">20952656, PubMed:26976583). Catalyzes a 2 steps reaction starting with the ATP-dependent carboxylation of the biotin carried by the biotin carboxyl carrier (BCC) domain followed by the transfer of the carboxyl group from carboxylated biotin to acetyl-CoA (PubMed:19236960, PubMed:20457939, PubMed:20952656, PubMed:26976583). Through the production of malonyl-CoA that allosterically inhibits carnitine palmitoyltransferase 1 at the mitochondria, negatively regulates fatty acid oxidation (By similarity). Together with its cytosolic isozyme ACACA, which is involved in de novo fatty acid biosynthesis, promotes lipid storage (By similarity).

Cellular Location
Mitochondrion.

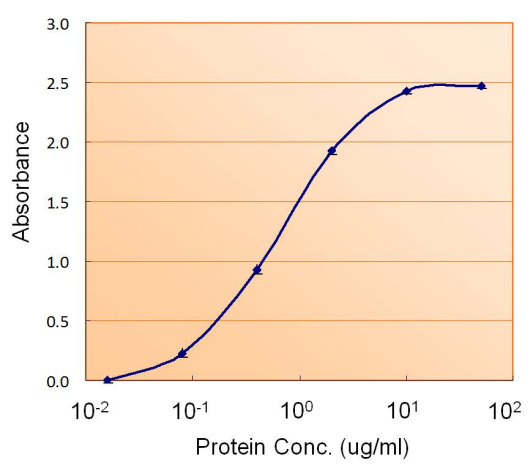
Tissue Location
Widely expressed with highest levels in heart, skeletal muscle, liver, adipose tissue, mammary gland, adrenal gland and colon (PubMed:9099716). Isoform 3 is expressed in skeletal muscle, adipose tissue and liver (at protein level) (PubMed:19190759). Isoform 3 is detected at high levels in adipose tissue with lower levels in heart, liver, skeletal muscle and testis (PubMed:19190759)

ACACB Antibody (internal region) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ACACB Antibody (internal region) - Images



AF2572a (1.5ug/ml) as the reporter with EB002020 as the capture rabbit antibody (5ug/ml).

ACACB Antibody (internal region) - References

Aging-Associated Reductions in AMP-Activated Protein Kinase Activity and Mitochondrial Biogenesis. Reznick RM, Zong H, Li J, Morino K, Moore IK, Yu HJ, Liu ZX, Dong J, Mustard KJ, Hawley SA, Befroy D, Pypaert M, Hardie DG, Young LH, Shulman GI. Cell Metab. 2007 Feb;5(2):151-6. PMID: 17276357