

## Rabbit ACC1 Polyclonal Antibody | anti-ACC1 antibody

Phospho-ACC1 (Ser80) Antibody

| CATALOG # | HOST   | REACTIVITY        | APPLICATIONS                                                                       |
|-----------|--------|-------------------|------------------------------------------------------------------------------------|
| AAA321712 | Rabbit | Human, Mouse, Rat | ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot |

### PRODUCT SYNONYMS

ACC1; Polyclonal Antibody; Phospho-ACC1 (Ser80) Antibody; ACAC; ACACA; ACACA\_HUMAN; ACACB; ACC alpha; ACC; ACC beta; ACC-alpha; ACC2; ACCA; ACCB; Acetyl CoA carboxylase 1; Acetyl CoA carboxylase 2; Acetyl CoA carboxylase alpha; Acetyl CoA carboxylase beta; Acetyl Coenzyme A carboxylase alpha; Acetyl Coenzyme A carboxylase beta; Biotin carboxylase; COA1; COA2; HACC275; OTTHUMP00000164069; OTTHUMP00000164070; OTTHUMP00000164076; OTTHUMP00000240532; anti-ACC1 antibody

### PRODUCT SPECIFICATIONS

|                                                |                                                                                                                                                               |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                           | Rabbit                                                                                                                                                        |
| Reactivity                                     | Human, Mouse, Rat                                                                                                                                             |
| Clonality                                      | Polyclonal                                                                                                                                                    |
| Isotype                                        | IgG                                                                                                                                                           |
| Specificity                                    | Phospho-ACC1 (Ser80) antibody detects endogenous levels of ACC1 only when phosphorylated at Serine 80                                                         |
| Purity/Purification                            | From purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.                       |
| Form/Format                                    | Liquid<br>Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.                                                                 |
| Concentration                                  | 1mg/ml (varies by lot)                                                                                                                                        |
| Sequence Length                                | 2383                                                                                                                                                          |
| Applicable Applications for anti-ACC1 antibody | ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)                                                      |
| Immunogen                                      | A synthesized peptide derived from human ACC1 around the phosphorylation site of Serine 80                                                                    |
| Tissue Specificity                             | Expressed in brain, placental, skeletal muscle, renal, pancreatic and adipose tissues; expressed at low level in pulmonary tissue; not detected in the liver. |
| Predicted Cross Reactivity                     | <b>Pig, Zebrafish, Bovine, Horse, Sheep, Rabbit, Dog, Chicken</b>                                                                                             |
| Similarity                                     | Pig (100%), Zebrafish (85%), Bovine (100%), Horse (92%), Sheep (100%), Rabbit (92%), Dog (100%), Chicken (80%)                                                |
| Conjugation                                    | Unconjugated                                                                                                                                                  |
| Epitope                                        | Phospho Ser80                                                                                                                                                 |
| Preparation and Storage                        | Store at -20 degree C. Stable for 12 months from date of receipt.                                                                                             |

IMAGES



**WB (Western Blot)**  
Western blot analysis of Phospho-ACC1 (Ser80) expression in various lysates



**WB (Western Blot)**  
Western blot analysis of ACC1 phosphorylation expression in Insulin treated K562 whole cell lysates, The lane on the left is treated with the antigen-specific peptide.



**IF (Immunofluorescence)**  
AAA321712 staining 293 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



**IHC (Immunohistochemistry)**  
AAA321712 at 1/200 staining human liver cancer tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-ACC1 antibody

Description: ACC1 a subunit of acetyl-CoA carboxylase (ACC), a multifunctional enzyme system. Catalyzes the carboxylation of acetyl-CoA to malonyl-CoA, the rate-limiting step in fatty acid synthesis.

Function: Catalyzes the rate-limiting reaction in the biogenesis of long-chain fatty acids. Carries out three functions: biotin carboxyl carrier protein, biotin carboxylase and carboxyltransferase.

Subunit Structure: Monomer, homodimer, and homotetramer. Can form filamentous polymers. Interacts in its inactive phosphorylated form with the BRCT domains of BRCA1 which prevents ACACA dephosphorylation and inhibits lipid synthesis. Interacts with MID1IP1; interaction with MID1IP1 promotes oligomerization and increases its activity.

Post-translational Modifications: Phosphorylation on Ser-1263 is required for interaction with BRCA1.

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                |
|----------------------------------|--------------------------------------------------------------------------------|
| NCBI GI #                        | 38679960                                                                       |
| NCBI GeneID                      | 31                                                                             |
| NCBI Accession #                 | NP_942131.1                                                                    |
| NCBI GenBank Nucleotide #        | NM_198834.2                                                                    |
| UniProt Accession #              | Q13085; Q6KEV6; Q6XDA8; Q7Z2G8; Q7Z561; Q7Z563; Q7Z564; Q86WB2; Q86WB3; B2RP68 |
| Molecular Weight                 | Observed: 280 kDa<br>Predicted: 266 kDa                                        |
| NCBI Official Full Name          | acetyl-CoA carboxylase 1 isoform 1                                             |
| NCBI Official Synonym Full Names | acetyl-CoA carboxylase alpha                                                   |
| NCBI Official Symbol             | ACACA                                                                          |
| NCBI Official Synonym Symbols    | ACC; ACAC; ACC1; ACCA; ACACAD                                                  |
| NCBI Protein Information         | acetyl-CoA carboxylase 1                                                       |
| UniProt Protein Name             | Acetyl-CoA carboxylase 1                                                       |
| UniProt Gene Name                | ACACA                                                                          |
| UniProt Synonym Gene Names       | ACAC; ACC1; ACCA; ACC1                                                         |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/acc1-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/321712>