For Research Use Only

ACC1
Polyclonal ANTIBODY

Catalog Number: 21923-1-AP

Basic Information

Catalog Number: 21923-1-AP
Size: 75 μg/150 μl
Source: Rabbit
Isotype: IgG
Purification Method: Antigen affinity purification

Immunogen Catalog Number: AG16452
GenBank Accession Number: BC137287
GeneID (NCBI): 31
Full Name: acetyl-Coenzyme A carboxylase alpha

Calculated MW: 2383aa, 275 kDa
Observed MW: 260-270 kDa

Recommended Dilutions:
WB 1:500-1:1000
IP 0.5-4.0 μg for IP and 1:100-1:1000 for WB
IHC 1:100-1:400
IF 1:20-1:200

Applications

Tested Applications: IF, IHC, IP, WB, ELISA
Cited Applications: IF, IHC, WB

Species Specificity: human, rat

Note-IHC: suggested antigen retrieval with 
TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

ACACA (Acetyl-CoA carboxylase 1, ACC), also named as ACAC, ACC1 and ACCA, belongs to the biotin containing enzyme family. It catalyzes the synthesis of malonyl-CoA, which is an intermediate substrate playing a pivotal role in the regulation of fatty acid metabolism and energy production. ACACA is involved in the biosynthesis of fatty acids, and malonyl-CoA produced is used as a building block to extend the chain length of fatty acids by fatty acid synthase (FAS)/PMID:19900410). It has 4 isoforms produced by alternative promoter usage with the molecular weight between 260 kDa and 270 kDa.

Notable Publications

<table>
<thead>
<tr>
<th>Author</th>
<th>Pubmed ID</th>
<th>Journal</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shifeng Pan</td>
<td>29152131</td>
<td>Oncotarget</td>
<td>WB</td>
</tr>
<tr>
<td>Yanan Hao</td>
<td>27604294</td>
<td>J Nat Med</td>
<td>IHC</td>
</tr>
<tr>
<td>Jia-Shun Wu</td>
<td>30235497</td>
<td>Front Microbi</td>
<td></td>
</tr>
</tbody>
</table>

Storage

Storage: Store at -20°C. Stable for one year after shipment.

Storage Buffer: PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage.

For technical support and original validation data for this product please contact:
T 1 (888) 4PTGLAB (1-888-478-4522) toll free in USA, or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.
HeLa cells were subjected to SDS PAGE followed by western blot with 21923-1-AP (ACC1 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.

IP Result of anti-ACC1 (IP:21923-1-AP, 5ug; Detection:21923-1-AP 1:500) with HeLa cells lysate 2800ug.

Immunohistochemical analysis of paraffin-embedded human skeletal muscle tissue slide using 21923-1-AP (ACC1 antibody at dilution of 1:200 (under 10x lens).

Immunofluorescent analysis of HeLa cells using 21923-1-AP (ACC1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).