Best Tools for immunology Research

ACC1 α protein

Catalog No :	YD0003
Reactivity :	Human
Applications :	WB;SDS-PAGE
Protein Name :	ACC1 α protein
Sequence :	Amino acid: 2264-2383, with his-MBP tag.
Human Gene Id :	31
Human Swiss Prot No :	O00763/Q13085
Formulation :	Liquid in PBS
Source :	E.coli
Dilution :	WB 1:500-2000
Concentration :	SDS-PAGE >90%
Storage Stability :	-20°C/6 mouth,-80°C for long storage
Background :	catalytic activity:ATP + acetyl-CoA + HCO(3)(-) = ADP + phosphate + malonyl-CoA.,catalytic activity:ATP + biotin-carboxyl-carrier protein + CO(2) = ADP + phosphate + carboxybiotin-carboxyl-carrier protein.,cofactor:Binds 2 manganese ions per subunit.,cofactor:Biotin.,enzyme regulation:Activated by citrate. Inhibited by malonyl-CoA.,function:ACC-beta may be involved in the provision of malonyl-CoA or in the regulation of fatty acid oxidation, rather than fatty acid biosynthesis. Carries out three functions: biotin carboxyl carrier protein, biotin carboxylase and carboxyltransferase.,pathway:Lipid metabolism; malonyl-CoA biosynthesis; malonyl-CoA from acetyl-CoA: step 1/1.,similarity:Contains 1 ATP-grasp domain.,similarity:Contains 1 biotin carboxylation domain.,similarity:Contains 1 biotinyl-binding domain.,similarity:Contains 1 carboxyltransferase domain.,subcellular location:May associate with membranes.,tissue specificity:Predominantly expressed in the heart, skeletal muscles and liver.,
Function :	fatty acid metabolic process, fatty acid biosynthetic process, lipid biosynthetic

process, regulation of cellular ketone metabolic process, organic acid biosynthetic process, regulation of lipid metabolic process, regulation of fatty acid metabolic process, regulation of fatty acid oxidation, carboxylic acid biosynthetic process,

Subcellular Location : Mitochondrion .

Expression : 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).

Products Images